UNITED STATES OF AMERICA
1776
250
2026
YEARS
ANNIVERSARY

CrossTalk

July 2026 *Serving Amateur Radio & Our Community For 67 Years* *Issue 67 : 07*

2026 Club Officers

President :	Jonathan Pearce WB2MNF
Vice President :	Ronald Block NR2B
Treasurer :	John O'Connell K2QA
Recording Secretary :	John Zaruba Jr K2ZA
Corresponding Secretary :	Michael Resnick N2WOQ

Trustees - 4 Year Term

Sheldon Parker K2MEN	(2023-2026)
Len Rust W2LJR	(2024-2027)
Earl Moore KC2NCH	(2025-2028)
Greg Ciraula K3GC	(2026-2029)

Directors - 3 Year Term

Al Arrison KB2AYU	(2024-2026)	Frank Romeo N3PUU	(2025-2027)
Bill Price NJ2S	(2024-2026)	Chris Prioli AD2CS	(2026-2028)
Jeffrey Garth WB2ZBN	(2025-2027)	James Wright N2GXJ	(2026-2028)

General Membership Meeting
Wednesday, July 01, 2026 @ 1900 Hours
In-Person & ZOOM : 982 4039 1944, 091084

License Testing Session
Thursday, July 09, 2026 @ 1900 Hours
W2MMD Clubhouse

Tech Saturday Forum
Saturday, July 11, 2026 @ 0900 Hours
Saturday, July 18, 2026 @ 0900 Hours
W2MMD Clubhouse

Board of Directors Meeting
Wednesday, July 15, 2026 @ 1900 Hours
W2MMD Clubhouse

Revolutionary War POTA Prep Meeting
Dinner @ The W2MMD Clubhouse
Wednesday, July 22, 2026 @ 1800 Hours

Gloucester County 4-H Fair
July 23 - 27, 2026

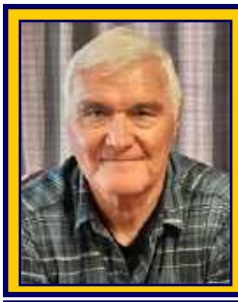
Tuesday AfterNoon 2M Net @ 1200 Hours

Thursday Night 2M Net @ 2000 Hours

Monday & Thursday Night 40M Net @ 1930 Hours
7.165 MHz (+/- 10 kHz)

Inside This Issue…

President's Letter ..... *Page 3*
July 1st General Membership ..... *Page 4*
July 11th & 18th Tech Saturday Forum ..... *Page 5*
End-Fed Half-Wave Antenna ..... *Page 7*
Welcome New Members ..... *Page 9*
DA's & DIT's ..... *Page 10*
GCARC Monthly VE Exam Summary ..... *Page 11*
Regional Hamfest & Events ..... *Page 13*
The Education Connection ..... *Page 14*
At The Repair Bench ..... *Page 17*
Volunteer Appreciation Awards ..... *Page 20*
Club Member DMR IDs ..... *Page 22*
GC-ARES News Update ..... *Page 24*
Revolutionary War POTA Event ..... *Page 26*
Element 4 Question Quiz ..... *Page 29*
From The Help Desk ..... *Page 31*
Ham Crossword Puzzle ..... *Page 34*
Audio Dummy Load Build ..... *Page 35*
Jersey String Band Update ..... *Page 38*
General Membership Meeting Minutes ..... *Page 39*
Board of Directors Meeting Minutes ..... *Page 41*
W2SEF / 4J75M QSL Card ..... *Page 44*
DXCC Honor Roll ..... *Page 49*
July 2026 Birthdays ..... *Page 50*
Electronic Tool Tip #19 ..... *Page 51*
NG3K Announced DX Operations ..... *Page 52*
Club Member Contest Scores ..... *Page 53*
July 2026 Contest Calendar ..... *Page 55*
2026 Club Committees ..... *Page 59*
Last Page Calendar ..... *Page 60*



President's Letter
Jon Pearce WB2MNF

July 2026

I'm at a real disadvantage writing this month's letter. It's Saturday, June 20th, Field Day is still a full week away, and by the time you read this it may be history. So while you already know exactly how we did, I'm stuck back here in the past, working blind. All I can do from a week behind you is hope the bands were open, the weather co-operated, the generators behaved, and that we put in a showing we can be proud of. I'll find out how it all went at roughly the same moment you're reading about it - fingers crossed.

Speaking of getting together : the July 1, 2026 General Membership Meeting is our ever-popular **Pizza Night**. There's no formal program this time - just pizza, good company, and the kind of unhurried rag chewing that doesn't need a slideshow. We may also have a preview of the official Field Day results! Come hungry.

Once again we've put together another great Tech Saturday Forum construction project for July. **Chris Prioli AD2CS** has cooked up a matching transformer for an end-fed halfwave antenna. It's easy to install, works well across multiple bands, and it's built to last - a custom printed circuit board of Chris's own design housed in a rugged, water- and UV-proof enclosure. Take a look at the photo on **Page 5**, this is a high-quality unit. Several of our WSPR network participants are planning to put these to work on their transmitting stations, and we'll run one at the Clubhouse too. It would pair beautifully with the WSPR transmitters we built back in May. The July 11th session is already sold out, but as of this writing there's still room in the July 18th session - don't wait too long. **Go to : https://registration.w2mmd.org/wpregp/end-fed-half-wave-antenna-build**

Planning is well underway for the Revolutionary War POTA activities **Stan Slachetka WA2JRZ** is organizing, kicking off August 1 at Hancock House Park. These three events will be the highlights of our summer operating. They're a great chance for folks new to POTA to get on the air in an organized activity alongside experienced operators like **John Zaruba K2ZA**, and they put our hobby on display for the community right alongside the other Revolutionary War commemorations happening at the same time. I'm hoping for a strong turnout - come be part of it. There will be a planning meeting at the Clubhouse on **Wednesday, July 22, 2026** at 6pm.

August also brings the Perseids meteor shower, and with it a shot at one of the strangest weak-signal modes in all of ham radio : meteor scatter. As a meteor streaks through the atmosphere it leaves a brief trail of ionized gas that can bounce a radio signal back to earth for a fleeting instant - sometimes only a fraction of a second. The WSJT MSK144 mode was built precisely for this. You sit watching a quiet waterfall when a sudden flicker appears, followed immediately by a decode on the screen - proof that you just pulled a packet of data off a chunk of cosmic debris burning up some sixty miles overhead. It doesn't get much cooler than that. The Perseids peak the night of August 12-13, and several members have already committed to being at the Clubhouse at the optimal hour of 4 AM to give it a go. Here's hoping we field a small band of intrepid experimenters for this fascinating slice of the hobby. There's a helpful article on meteor scatter over on the **Skunkworks website (https://wp.w2mmd.org/wp/projects-and-activities/working-meteor-scatter-at-w2mmd-msk144-on-6-meters-perseids-guide),** and we'll cover Clubhouse meteor scatter operations at the August 8, 2026 Tech Saturday Forum as well.

One housekeeping note : the Clubhouse will be closed on Saturday, July 25, 2026 for the Gloucester County 4-H Fair. That's the weekend we trade our "front yard" for their parking - and in return get the use of the adjacent areas for Field Day. A fair deal all around.

See you at Field Day - I'll be the guy pointing antennas at the sky…

73 de Jon WB2MNF

General Membership Meeting

Wednesday, July 01, 2026 @ 1900 Hours

Pfeiffer Community Center

Simulcast Live Via ZOOM : Meeting ID : 982 4039 1944; Passcode : 091084
Join ZOOM Meeting Link : https://bit.ly/4s67geS

Go to : https://gloucestercountyarc.weebly.com/2026-content--activities--resources.html to download the ZOOM log-on instructions PDF

Tech Saturday Forum

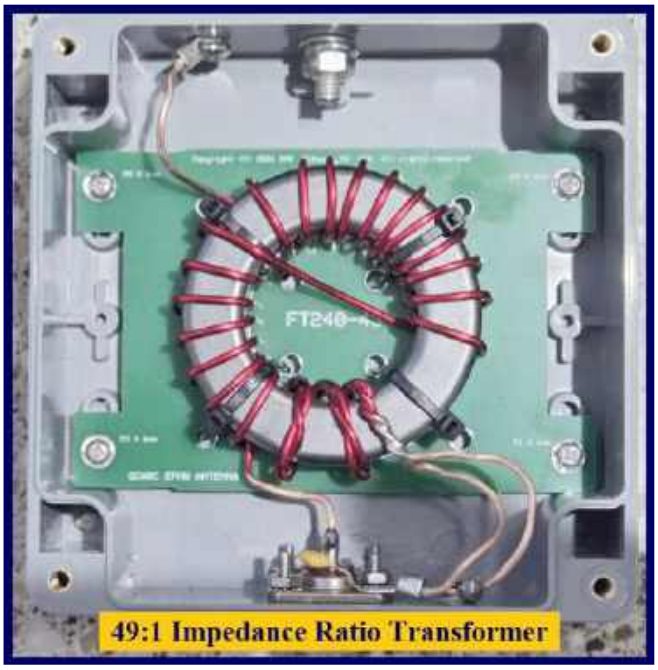
July 11, 2026 @ 0900 Hours (Class is full)
July 18, 2026 @ 0900 Hours

W2MMD Clubhouse
Forum Topic : End-Fed Half-Wave Antenna Build Class

Tech Saturday Forum is back with another hands-on learning and building session and a nice take-home project that you can put on the air right away. Once again **Chris Prioli AD2CS** will lead the group, this time through the construction of an end-fed half-wave (EFHW) antenna system from scratch. For $60 to $75 in parts and a morning of your time, you will learn the fundamentals of antenna impedance matching, build a weatherproof matching transformer, cut and connect your antenna wire, and leave with a fully tested HF antenna ready to use. The cost is **$60.00 for the 250 Watt, $67.50 for the 750 Watt,** or **$75.00 for the 1500 Watt** antenna.

What Is an End-Fed Half-Wave Antenna?

An EFHW is a single wire antenna fed at one end through a compact **49:1 matching transformer**. Cut the wire to a half-wavelength at your lowest desired operating frequency, and the antenna resonates naturally on all harmonic bands above that - with no antenna tuner required. A wire cut for 40 meters works on 40m, 20m, 15m, and 10m. Cut it for 80 meters and you cover the entire HF spectrum from 80m through 10m with a single piece of wire. Part of the morning will be spent understanding why this works - the physics of standing waves, impedance transformation, and why feeding an antenna at its end is both a challenge and an opportunity.


49:1 Impedance Ratio Transformer

Why Hams Love the EFHW

Beyond the learning experience, the antenna you build is genuinely useful. The EFHW solves several practical problems that get in the way of putting up a good antenna :

- **Feed it where it's convenient :** Unlike a dipole, which must be fed at its center - often the hardest point to reach - the EFHW is fed at one end. That end can be at a convenient height near your shack, connected with a short run of coax.
- **One wire, multiple bands :** A single piece of wire covers your primary band and all its harmonics. No traps, no loading coils, no switches.
- **Install it any way the terrain allows :** Straight, sloped, inverted-L, bent around a corner - the EFHW is forgiving about physical configuration. It works well in the kinds of irregular backyards most of us actually have.
- **Low visual profile :** A single thin wire between two supports draws far less attention than a center-fed dipole with its visible feed point hardware and hanging feedline - an important consideration for hams in HOA neighborhoods or on restricted properties.
- **Portable and field-ready :** The matching transformer, wire, and end insulator pack down into a small, lightweight bundle. Throw the far end over a tree branch and you can be on the air in minutes - the antenna of choice for Parks On The Air and emergency operations.
- **A great first HF antenna for Technicians :** Technicians have limited privileges on 10 meters but this is an ideal antenna for the 10 meter WSPR stations. An EFHW cut for 10m fits in almost any space and is a natural first step onto HF for newly licensed operators.

Tech Saturday Forum - Continued on page 6

Tech Saturday Forum - Continued from page 5

Put It to Work on the GCARC WSPR Network

The Club operates a crowdsourced WSPR propagation network, with member beacons monitoring HF band conditions around the clock. The EFHW is an ideal WSPR antenna - it stays connected permanently, covers multiple bands, and its modest footprint means it can be left up year-round without drawing attention. If you have been thinking about contributing a beacon to the Club network, this is your antenna. Build it on Saturday, hang it that afternoon.

What You Will Learn and Build

The project moves through three phases, each one a distinct skill and a piece of the finished antenna :

- **Toroid winding :** You will wind a 49:1 impedance transformer on a ferrite core - 21 secondary turns and 3 primary turns of enameled wire.
- **Mechanical assembly :** Mounting the SO-239 coax connector, installing the two stainless binding posts with wing nuts, fitting the top eye bolt for hanging, and sealing all penetrations so the enclosure is weatherproof for permanent outdoor use.
- **Wire cutting, connection, and testing :** You will calculate and cut your own antenna wire to the correct length for your chosen band, connect it to the matching transformer, and sweep the completed antenna on a vector network analyzer. You will see your own SWR curve and understand what it means before you leave.

The completed antenna system includes a sealed weatherproof PVC enclosure, an SO-239 coax connector, two stainless binding posts with wing nuts, a stainless eye bolt for hanging, and a ceramic egg insulator for the far end of the antenna wire.

How to Register

Space is limited, and pre-registration with advance payment will be required to reserve your kit. All materials and test equipment will be provided - there's nothing that you need to bring.

The registration link is : https://registration.w2mmd.org/wpregp/end-fed-half-wave-antenna-build

The sign-up period will be short so plan now to attend and build this useful antenna.

There is a new website for the Gloucester County Amateur Radio Club Volunteer Examiner Team. Everything you need to know about getting your ham license or upgrading your license can be found on this website. Pass It Around!

https://veteam.w2mmd.org

W2MMD

www.facebook.com/W2MMD

The End-Fed Half-Wave Antenna : Why a Transformer Is Essential

By Jon Pearce WB2MNF

This article complements the announcement of the July 11, 2026 Tech Saturday Forum to build an end-fed half-wave antenna and explains the technical issues surrounding its construction.

The end-fed half-wave antenna has become one of the most popular HF antennas in amateur radio, and for good reason - it is multiband, easy to deploy, and requires only a short coax run back to the shack. But connecting a coaxial feedline directly to the end of a half-wave wire is not straightforward. There is a fundamental mismatch between what the radio expects and what the antenna presents, and understanding that mismatch is the key to understanding why the matching transformer exists.

Standing Waves and the Voltage-Fed Feed Point

When RF energy travels down a wire and reaches the open end, it has nowhere to go and reflects back toward the source. The forward and reflected waves combine to produce a ***standing wave*** - a fixed pattern of voltage and current that oscillates in place along the wire's length.

The distribution is predictable and elegant. Current is maximum at the center of the wire and drops to zero at both ends. Voltage is the mirror image - zero at the center and maximum at the ends. This makes physical sense : electrons at an open end have nowhere to go, so current goes to zero there, and the resulting charge buildup drives voltage to its peak.

This is why an end-fed antenna is sometimes called a ***voltage-fed*** antenna. You are connecting your feedline at the point of maximum voltage and minimum current. That combination - high voltage, low current - means the antenna presents a very high impedance at its feed point, somewhere in the range of ***2,500 to 4,000 ohms*** depending on frequency, wire height, and nearby objects.

The Mismatch Problem

Your radio and coaxial feedline are designed for a ***50-ohm*** system. Connecting 50-ohm coax directly to a 2,500–4,000 ohm antenna creates an impedance mismatch ratio of roughly ***50:1***. The consequences are severe :

- The SWR at the feed point would be 50:1 or worse
- Most modern transceivers fold back power dramatically above SWR 3:1, protecting their output stage
- The small fraction of power that does reach the antenna arrives inefficiently
- Return current has no proper path, so it flows back down the ***outside*** of the coax shield, causing the feedline to radiate - bringing RF into the shack, creating interference, and making the antenna pattern unpredictable

Simply using an antenna tuner in the shack does not solve this. A tuner can present the correct impedance to the transmitter, but it does not prevent common-mode current from traveling on the coax shield between the antenna feed point and the tuner. The mismatch and its consequences remain at the antenna end.

The 49:1 Matching Transformer **(See picture on Page 5)**

The solution is to place a ***broadband impedance transformer*** at the feed point itself - inside the weatherproof enclosure that is the heart of this project. The transformer converts the antenna's ~2,450 ohm feed point impedance down to 50 ohms, right at the point where the antenna meets the coax. With a properly matched feed point, the coax carries only the intended signal and the transmitter sees the load it was designed for.

The impedance transformation ratio is the square of the turns ratio. To step down from ~2,450 ohms to 50 ohms requires a ratio of 49:1, which means a turns ratio of 7:1. In practice this is achieved by winding ***3 primary turns*** and ***21 secondary turns*** - a 7:1 ratio - on a ferrite toroid core. Three turns on the primary side connects to the 50-ohm coax; twenty-one turns on the secondary side connects to the antenna wire.

End-Fed Half-Wave Antenna - Continued on page 8

End-Fed Half-Wave Antenna - Continued from page 7

The Ferrite Core

The toroid core is not just a form for winding wire - it is an active participant in the transformer's operation. The ferrite material (Mix 43 in this project) has high magnetic permeability, which concentrates the magnetic field and allows the transformer to work efficiently across a wide range of frequencies with only a few turns of wire.

Without the core, you would need many more turns to achieve the same inductance, and the transformer would become frequency-selective rather than broadband. The core enables the matching transformer to work from 80 meters through 10 meters with a single winding - the same transformer serves all bands.

The Counterpoise

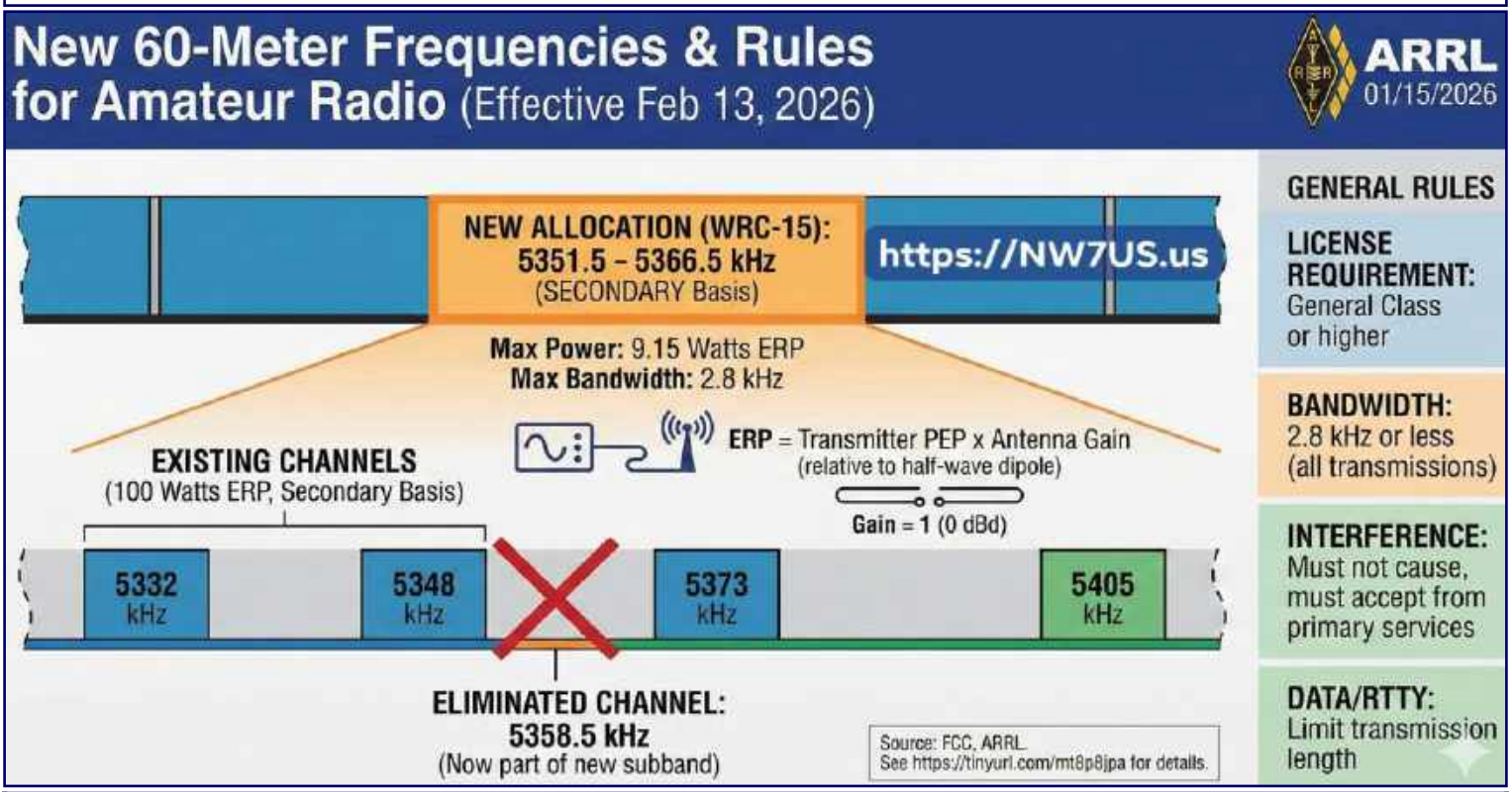
One remaining problem : a transformer has two sides, and the secondary side needs a return path for current just as much as the primary does. In a center-fed dipole, the return path is the other half of the antenna, which carries equal and opposite current symmetrically. An end-fed antenna has no second half.

Without a return path, current looks for one on its own - and it finds the coax shield. A short ***counterpoise wire***, typically 0.05 wavelengths at the lowest operating frequency, attached to the ground terminal of the matching transformer provides that return path locally. It does not need to be resonant or carefully tuned; it simply needs to exist so that coax shield current is suppressed.

Why Multiband Operation Works

A half-wave wire cut for 40 meters is also a full wave on 20 meters, three half-waves on 15 meters, and two full waves on 10 meters. In each case, the standing wave pattern still places a ***voltage maximum at the fed end*** of the wire - the same high-impedance condition exists on every harmonic band. The same 49:1 transformer therefore presents approximately the correct transformation on each of those bands, which is why a single wire and a single transformer can cover four or more bands without a tuner.

This harmonic relationship is the elegant physics that makes the EFHW so practical, and the matching transformer is the device that makes it accessible to a 50-ohm world.



Welcome New Club Members :

Ted Coyle AA4AZ (Returning Member 2017), an Amateur Extra Class from Pittsgrove, NJ.
Virginia Macrie KA2ZZA (Returning Member 1986), an Amateur Extra Class from Hammonton, NJ.
Charles Shorter Jr W2JOY, an Amateur Extra Class from Pemberton, NJ.

We are glad to have you as a member of the Club and hope to see you regularly at Club meetings, events, and activities. Hope to see you at :

- **The July 1st General Membership Meeting, either in-person or on ZOOM**
- **The July 11th Tech Saturday Forum @ the W2MMD Clubhouse**
- **The July 18th Second EFHW Class @ the W2MMD Clubhouse**
- **The Board of Directors Meeting on July 15th**
- **The Dinner @ The W2MMD Clubhouse on July 22nd**
- **Revolutionary War POTA Planning Meeting on July 22nd**

We also hope to "SEE" you on the "AIR" on the following nets :

- **Sunday Night Skywarn 2 Meter Net @ 1930 Hours**
- **Sunday Night ARES 2 Meter Net @ 2000 Hours**
- **Tuesday AfterNoon 2 Meter Net @ 1200 Hours**
- **Monday & Thursday Night 40 Meter Nets on 7.165 MHz (+/- 10 kHz) @ 1930 Hours**
- **Thursday Night Rag Chew 2 Meter Net @ 2000 Hours**

All 2 Meter Nets are on our 147.180 MHz (PL 131.8) repeater or on EchoLink W2MMD-R.

ARRL is calling on all radio amateurs and GRMS licensees to join our nationwide grassroots campaign to pass the **Amateur Radio Emergency Preparedness Act**. ARRL has made it very easy to send your letters to Congress. Hams should go to **https://send-a-letter.org/HOA** and GMRS users should go to **https://send-a-letter.org/GMRS**. The letters will automatically be sent to your elected officials encouraging them to support the bipartisan bills. Passage would give amateur radio operators the same rights to install antennas on their property as those enjoyed by users of TV antennas, wireless internet, and flagpoles. Radio clubs should also prepare letters of support, signed by each club officer.

See instructions for clubs (PDF) and a sample letter for clubs (DOCX). For more information about the ARRL campaign to Pass The Bill, visit **www.arrl.org/HOA**. And please share these YouTube videos on your personal social media.

Article Credit : The ARRL Letter for November 6, 2025 - **www.arrl.org**

So you find our website confusing, can't find anything

I have created a page called "Quick Links"

On this page you will find "Buttons" to some the most popular pages
I will add more as time goes on, but I hope this helps your journey navigating through your Club Website!
https://gloucestercountyarc.weebly.com/quick-links.html

DAs & DITs

>> Senator Ted Cruz of Texas highlights Amateur Radio Public Service : **https://youtu.be/o9x2BYjKk5c?si=QIKlQjdd1jOrTCNt**

>> Congratulations to **Bob Lange KE2IRX**, new **Technician Class** and **Full Member**.

>> Congratulations to **Dan Devlin KC2GYU**, new **Amateur Extra Class**.

>> Ron Fish KX1W, reports on the ARRL America 250 WAS W1AW/2 activation on June 3, 2026. The activation period is over, and it was very successful. **Bob Beyer KE2D**, did an after-operation report, and the numbers were :

- 217 time slots were booked on the scheduler
- 337 hours of operation were scheduled (48 hours of operating time PER DAY)
- There were 39 operators, and possibly more. Difficult to be certain because some slots were booked under club calls.
- Great job - let's do it again on August 5, 2026!

>> Congratulations to **Matthew Butch KV3JGB**, the new **ARRL Eastern Pennsylvania Section Manager**. His term of office started on June 8, 2026.

>> Terry Rossi N2LQH, reports on the **CW4EVER Callsign Trainer (https://cw4ever.eu/trainer)**. A free online platform designed to help Amateur Radio operators improve their callsign recognition skills for contesting, DXing, and everyday operating.

Be A Club Volunteer!

2026 / 2027 Clubhouse Construction Volunteer Projects :

Shed : Build Ramp

Clubhouse :

- **Build Ramp**
- **Replace Interior Front Door**
- **Power Wash Siding**
- **Replace Back Steps**
- **Replace paneling in Main Room**
- **Replace AC in Main & HF rooms**
- **Install drop ceiling in Main Room**

Lightning Protection Project :

- **Complete grounding rod installation around Clubhouse and Towers**

Install Utilities On New Front Parking Lot Pole

Install Antennas On New VHF Towers

GCARC Monthly VE Exam Testing Summary - June 2026

By Chris Prioli AD2CS

The June 2026 GCARC VE session was held on Thursday, 11 June. The VE session was held at the W2MMD Clubhouse and was administered by Volunteer Examiners as listed below, with Chris Prioli AD2CS serving as Team Liaison for the event :

- **Earl Moore KC2NCH**
- **John O'Connell K2QA**
- **Courtney Smith KD2SPJ**

There were three candidates as listed below, each of whom sat for their exams as indicated in the following list. The candidates were :

- **Dan Devlin KC2GYU, new Amateur Extra from Seaville, NJ**
- **Bob Lange KE2IRX, new Technician from Somerdale, NJ**
- **Connor Van Name KE2IRV, new youthful Technician from Cinnaminson, NJ**

Connor Van Name KE2IRV is a 14-year-old ham now, who has been offered a no-cost Student membership in GCARC. Bob Lange and Dan Devlin are already GCARC members.

The VE Team proctored the exam session using only electronic methodologies, in accordance with our current policy.

The next regularly scheduled VE session will be held on Thursday, 9 July 2026, at 1900 Hours at the W2MMD Clubhouse. The VE team will be using the ExamTools system to its fullest capability, within our current technological means.

It is important that all test candidates going forward will be advised, whenever possible, to pre-register and pre-pay for the exam online. Specifics of that process are explained at : **https://veteam.w2mmd.org**

GCARC VE Team Historical Summary

	Technician Class	General Class	Amateur Extra	Total
2016	18	8	6	32
2017	22	19	4	45
2018	29	23	5	57
2019	16	10	8	34
2020 *	8	4	1	13
2021 *	8	5	1	14
2022	22	15	18	55
2023	20	18	10	48
2024	22	12	6	40
2025	24	14	6	44
2026	7	1	3	11
2027				
2028				
2029				
2030				
Totals	196	129	68	393
	* Pandemic	Period		

Gloucester County Amateur Radio Club
YouTube Channel
https://www.youtube.com/@W2MMD

What's happening in the ARRL Southern New Jersey Section??
Subscribe to the ARRL SNJ Section Groups.IO
https://groups.io/g/ARRLSouthernNewJerseySection

Membership Badges Ready For Pick-Up

They can be picked up at the W2MMD Clubhouse or at the monthly General Membership Meetings

Alex Calabrese WA2ADS
Jon Davidson KE2DYD
Robert Erenburg KD3BGJ
Jim Foster W3JNF
Deirdre Anne Hebert AD2GQ
Gary Hewitt N2WHV *
John McGonigle KC3ZJX
Jack Snyder AI2D
Harry Strahlendorf W3DNQ
Marian Yanka KE2GOL

The Clubhouse is open and accessible every Saturday from 0700 until 1600 Hours, and on the third and fourth Wednesday evening of each month as well as the second Thursday evening of each month from about 1700 until 2000 Hours.

The badges can also be picked up at any General Membership Meeting. They will be displayed at the Hospitality Table

If there is an asterisk (*) after your call sign above, your badge is a replacement and has a cost of $5.00 payable to the Club at the time of pickup of the badge.

Club Merchandise from the K2ZA Workshop

Contact John Zaruba Jr K2ZA at k2za@icloud.com

Go To : https://gloucestercountyarc.weebly.com/club-merchandise.html

ADIF Logs Wanted When Operating As W2MMD @ The Clubhouse

By Jim Wright N2GXJ - Contact me via e-mail on Club Roster List

It is a common courtesy in ham radio to be able to QSL 2-way contacts made with other hams. We're pretty good about doing this for our field day contacts made each year, but are falling behind in this for contacts we make from the Clubhouse as W2MMD.

So here is the ask :

If you operate from the Clubhouse as W2MMD (e.g. on HF, UHF/VHF, or on Satellite, at Tech Saturday, or during contests or other), please email me the electronic log entries in ADIF format from the logger program you used for those contacts?

That way, just like I do following field day each year, I can get them uploaded to LOTW and to eQSL to offer the courtesy of an electronic QSL to those who make contact with us as W2MMD here in NJ.

Thank you

Regional (Atlantic & Hudson Divisions) Hamfests & Events

July 4, 2026 : Harrisburg Radio Amateurs Club, Firecracker Hamfest, Harrisburg Postal Employees Picnic Grounds, 1500 Roberts Valley Road, Harrisburg, PA. **www.w3uu.org**

July 5, 2026 : Murgas Amateur Radio Club, 47th Annual Wilkes-Barre Murgas ARC Hamfest & Electronics Flea Market, Polish American Veterans Club, 2 South Oak Street, Wilkes-Barre (Plains), PA. **www.murgasarc.org**

July 11, 2026 : Wattsburg Wireless Association, Hamfest! Amateur Radio Swap Meet & Expo, Greene Township Municipal Building Parking Lot, 9333 Tate Road, Erie, PA. **www.wattsburgwireless.org**

July 11, 2026 : Radio Amateurs of Greater Syracuse, Roger's RAGS Hamfest 2026, Camillus Elks Lodge #2367, 6117 Newport Road, Camillus, NY. **www.ragsclub.org**

July 12, 2026 : Sussex County Amateur Radio Club, 47th Annual SCARC Hamfest, Sussex County Farm & Horse Show Fairgrounds, 37 Plains Road, Augusta, NJ. **www.sussexhamfest.org**

July 18, 2026 : Lancaster Amateur Radio Club, Batavia Hamfest, Alexander Fireman's Grounds, 10708 Alexander Road (Route 98), Alexander, NY. **www.w2so.org**

July 19, 2026 : Somerset County Amateur Radio Club, Somerset County PA Hamfest, Somerset County Technology Center, 281 Technology Drive, Somerset, PA. **www.k3smt.org**

July 25, 2026 : New Jersey Antique Radio Club, NJARC Summer Tailgate Swap Meet & Hamfest, InFoAge Science History Learning Center & Museum, 2201 Marconi Road, Wall Township, NJ. **www.njarc.org**

July 25, 2026 : Utica Amateur Radio Club, RadioCom 2026 Hamfest, Clark Mills Fire Department, 7700 Main Street, Clark Mills, NY. **www.uticaarc.org**

July 1, 2026-1300 UTC to July 8, 2026-0400 UTC

The Education Connection

By Chris Prioli AD2CS - chris@ad2cs.com
www.ad2cs.com

July 2026

By the time that you read this, Field Day 2026 will either be in the immediate future or it will just have passed into the rear view. Either way, the excitement - and exhaustion - of Field Day is very real, especially to those who experience it for the first time. First there is the planning stage, where a workable concept of just what your team will do and how they will do it. The planning, however, is largely over when the Friday afternoon immediately prior to the event arrives, as it is on that day that the actual execution of your team plan begins to take shape. There is the placement or construction of a shelter, the preparation of your power source, the laying of cables for power. Then there is the setup of the radio and ancillary equipment inside the shelter, and of course the erection of your antenna. Field Day often brings us some novel and interesting antenna designs, but this is a part of the whole concept, right?

After all of the setup, when everything is ready, we have the wait - hopefully it is mercifully short - for the magical time to arrive when the on-air portion of the event can begin. Then it is all hands on deck to accumulate as many QSO's as possible, working your assigned or selected band for all you are worth. Sometimes conditions are good, and the QSO's come easily. Other times, the band gods are not quite so good to us, and we really have to work for each and every contact made. As the Solar Cycle 25 peak moves further behind us, the band conditions promise to get worse… but still we try!

In all of this excitement and activity, please don't forget to take some time to share some knowledge and experience with the newer hams among us. There are certain to be some first-timers out there this year, as there are every year. It is my wish that these hams who are new to Field Day come away having had a good experience, and also come away having learned something - a new skill, how to set up a radio, how to install an antenna, how to act on the air… it does not matter what - just something! At that point, Field Day 2026 will have been a success, no matter what our final scores turn out to be.

On another topic… we have another group build project coming up very soon. We are planning the build-out of a set of λ/2 end-fed antennas by several of our members. As I write this, the registration period is still open, and I anticipate it remaining open almost until the date of the event. At this point, the event is set for **Saturday, 11 July**. If we have sufficient registrants to require the scheduling of a second build session, that will be announced when a decision is made in that regard.*****

The antenna is a basic 250-watt capable end-fed dipole based upon a 49:1 impedance ratio transformer in a weathertight enclosure. Only the highest quality parts are being used, with stainless steel hardware throughout. With a price tag of **$60**, this antenna is a great value… plus you get the enjoyment and satisfaction of actually building it yourself. Notice that I did not mention any wavelength for this antenna build. That is because each builder will have the task of deciding what band they want to build for at the time of the actual build session.

While the registration site is still active, go to : **https://registration.w2mmd.org/wpregp/end-fed-half-wave-antenna-build** to register for this event.

It is certain to be a good one.

See you next month…

**** Another build session has been scheduled for Saturday, July 18, 2026 @ 0900 Hours.***

Tuesday AfterNoon Net @ 1200 Hours

147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

Here is the schedule for the upcoming weeks

Greg Ciraula K3GC : July 7, 2026
Steve Farney W2SEF : July 14, 2026
Rich Subers W2RHS : July 21, 2026
Jeff Garth WB2ZBN : July 28, 2026

Greg Ciraula K3GC : August 4, 2026
Steve Farney W2SEF : August 11, 2026
Rich Subers W2RHS : August 18, 2026
Jeff Garth WB2ZBN : August 25, 2026

If you would like to be a Net Control Station for this net, please contact Steve Farney W2SEF

Thursday Night Rag Chew Net @ 2000 Hours

147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

Here is the schedule for the upcoming weeks

Jeff Garth WB2ZBN : July 2, 2026
Mary Delemarre W2TDS : July 9, 2026
Gary Mirkin WA3SVW : July 16, 2026
Steve Farney W2SEF : July 23, 2026
Jeff Garth WB2ZBN : July 30, 2026

Jeff Garth WB2ZBN : August 6, 2026
Mary Delemarre W2TDS : August 13, 2026
Gary Mirkin WA3SVW : August 20, 2026
Steve Farney W2SEF : August 27, 2026

If you would like to be a Net Control Station for this net, please contact Jeff Garth WB2ZBN

Revolutionary War POTA Planning Meeting

"Dinner @ The W2MMD Clubhouse"

Wednesday, July 22, 2026 @ 1800 Hours

Need a ride to a Club meeting, event, or activity?

Just send a message to the Club's e-mail reflector asking if a member can pick you up

GCARC <*at*> MAILMAN <*dot*> QTH <*dot*> NET

All Club members have access to this FREE e-mail service

Gloucester County Skywarn Net

The Gloucester County Skywarn Net is held every Sunday @ 1930 Hours on the 147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

All Are Welcome To Participate
Net Control Station : Jeff Garth WB2ZBN

Gloucester County ARES Net

The Gloucester County ARES Net is held every Sunday @ 2000 Hours on the 147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

All are welcome to participate

Jeff Garth WB2ZBN : July 5, 2026
Gary Mirkin WA3SVW : July 12, 2026
Al Arrison KB2AYU : July 19, 2026
Craig Metzger KE2GNU : July 26, 2026
Bob Keogh KD2NEC : August 2, 2026
Steve Farney W2SEF : August 9, 2026
Angela Metzger KE2DRJ : August 16, 2026
Steve Farney W2SEF : August 23, 2026
Craig Metzger KE2GNU : August 30, 2026

Anyone who is interested in joining the Gloucester County ARES Team, is invited to contact Steve Farney W2SEF at sef001@comcast.net

Net Control Stations :
Al Arrison KB2AYU; Steve Farney W2SEF; Jeff Garth WB2ZBN; Bob Keogh KD2NEC;

Monday & Thursday Night 40 Meter Net @ 1930 Hours
7.165 MHz (+ /- 10 kHz)
NCS : Jim Clark KA2OSV

ARRL Learning Center
https://learn.arrl.org

Discover how to make Amateur Radio your own.

Online courses from the ARRL Learning Center provide ARRL members with additional instruction and training for getting on the air, emergency communications, and electronics and technology

At The Repair Bench…

A monthly column describing a recent repair bench event.

By Chris Prioli AD2CS - chris@ad2cs.com - www.ad2cs.com

Simpson 260® VOMM - July 2026

Figure 1 : Simpson 260® VOMM

Three years ago, I reported in this column on the repairs I made to a ***Simpson 260® VOMM*** that had a cracked circuit board. This month, I am looking at another of these venerable multimeters, another Series 5 (?) model that had a combination of ailments **(Figure 1).** This meter belongs to one of my fellow GCARC members, and she was happy to have the unit repaired, as it had belonged to her father, and therefore held some sentimental value to her.

When this particular meter came to me, it was basically inoperable, though we had ascertained that it would be repairable because we determined through some basic testing that the D'Arsonval meter movement was in good condition. The meter movement is the heart of the instrument. So long as the meter movement and the rotary function switch are in serviceable condition, it really doesn't matter what else may be wrong with the instrument… it will be repairable in the overwhelming majority of cases. However, if either of these two main components have failed, it will not be quite so simple to repair the unit. Don't get me wrong here… it can ***always*** be repaired, but sometimes the cost will exceed the value, at which point the repair is no longer a viable option for many owners.

Figure 2 : Simpson 260® Front Panel Controls and Jacks

These meters are actually very durable while also retaining an unbelievable resiliency, making them completely able to recover from many faults that would kill a lesser ***VOMM***. Before I go any further, lets take a minute to explain why I refer to the Simpson 260® as a VOMM. A standard multimeter includes a voltmeter and an ohmmeter, and are usually termed ***"VOM"*** for volt-ohmmeter. With many such instruments, that is then exactly what the tool offers - voltage and resistance measurements. The Simpson 260®, however, offers much more capability than that of a basic VOM, which is why its type nomenclature has been changed to ***VOMM***, meaning ***"volt-ohm-milliammeter"***.

The Simpson 260® VOMM incorporates three resistance ranges, four current ranges*, and five voltage ranges. Additional capability is afforded by the use of additional test lead jacks on the instrument front panel, and by the ***Polarity*** switch **(Figure 2)**. The ***Polarity*** switch is used to effectively reverse the test lead connections while making DC voltage measurements so that the meter always reads upscale. This switch also provides the capability of making AC voltage measurements. It should also be noted that one each of the voltage and current ranges actually have dual ranges assigned, with the second range being accessed via a dedicated front-panel jack for that function.

**** There is actually a fifth current "range" offered, that being a "50µA" range, which is accessed by setting the Range/Function switch to its "50V/µAmps" position, and then moving the red test lead to the "50 µAMPS" jack while the black test lead remains in the "COMMON -" jack.***

At The Repair Bench - Continued on page 18

At The Repair Bench - Continued from page 17

As to display capability, the Series 5 version of the venerable Simpson 260® VOMM was offered both with and without an anti-parallax mirror in the scale quadrant. ***"Parallax error"*** is that error that creeps in during the reading of an analog sweep-needle meter when the meter is not viewed directly head-on and straight-in. Viewing the meter from even a slight angle will cause the apparent needle position over the scale to be other than its actual position. The mirror helps to prevent the parallax error by allowing the user to ascertain proper viewing angularity. When the meter is viewed properly, ***i.e.,*** head-on and straight-in, there will be only one needle visible, as the mirrored image of the needle will be directly behind and therefore hidden by the actual meter needle. If the meter is viewed at even a slight angle, a second ***"needle"*** will appear, which is in reality the angle-offset mirror image of the sweep needle. Typically, a Simpson Series 5 meter that had a mirrored scale when it left the factory carried a model number of ***Simpson 260® Series 5M***.

Figure 3 : Simpson 260® Series 5 Meter Face

The standard Series 5 meter **(Figure 3)** incorporates a series of scales including a (black) ***decibel*** scale, (red) AC voltage and current scales, (black) DC voltage and current scales, and a single (black) resistance scale. At the bottom of the meter face, some important information about the instrument is provided. Some of this information will directly impact the value indicated by the meter. Other information provided there tells the user a little bit about how much accuracy can be expected from this instrument, or put another way, how much this instrument will affect the circuit to which it is connected when making voltage measurements. This is the very important ***"Ohms per Volt"*** rating of the instrument.

The ***"Ohms per Volt"*** specification tells the user what the input impedance of the instrument will be under various testing scenarios. Note, for example, that the DC rating is 20,000 ohms per volt. This means that if the user is making a measurement using the ten-volt DC Voltage scale, the input impedance of the instrument will be ten times twenty-thousand, or two-hundred-thousand ohms. This is a respectably high input impedance, which means that this instrument will have relatively little effect on the measured circuit when the meter is connected in parallel to the circuit under test, as is done when measuring voltage. The standard input impedance for most DVOM's and also for VTVM's and FETVOM's is right at about ten or eleven megohms overall.

OK - enough of the descriptive data about the instrument under repair here. Let's move on to the actual failures and repairs that were made on this particular specimen. As was noted at the time of the initial examination of the instrument, there was considerable damage done to the battery terminal leaf springs in the meter battery compartment. This version of the Simpson 260® uses one snap-top nine-volt battery and one 1.5-volt type ***"D"*** cell. The damage done was to the ***"D"*** cell compartment, with the damage being bad enough to necessitate complete replacement of the cell's negative terminal contact.

Additionally, the instrument had had a blown ***(open)*** fuse in its fuse holder. The owner attempted to source a replacement fuse, but she was unable to obtain the correct fuse, and as a result, a fuse with an incorrect value rating was installed in the unit. That too needed to be replaced.

The funny thing about this particular Simpson 260® is that it does not seem to truly be what its front panel says that it is. You see, according to the markings on the face of the meter movement, the unit it a Series 5 model. However, according to the physical structure of the instrument internals and the battery arrangement, it would appear to be a Series 6 model. Series 6 is the first time that Simpson used the nine-volt/one point five-volt configuration.

At The Repair Bench - Continued on page 19

At The Repair Bench - Continued from page 18

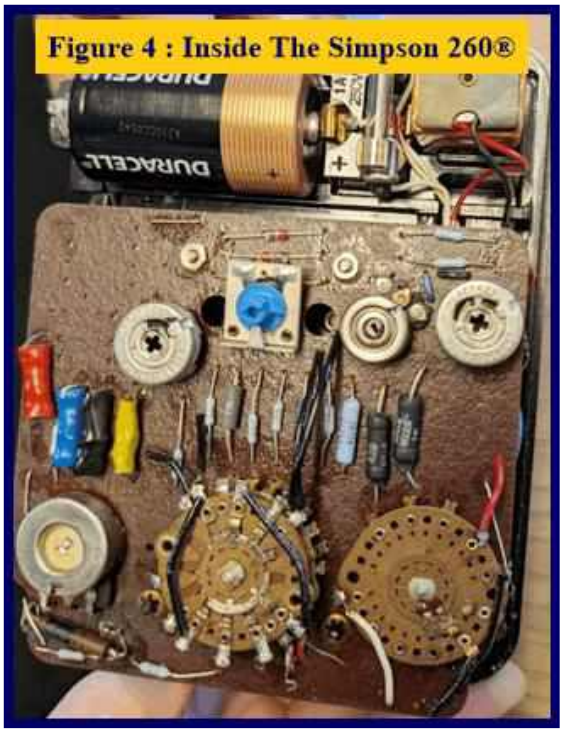


Figure 4 : Inside The Simpson 260®

Prior to that, the battery arrangement called for a 1.5-volt and 6-volt pairing, used as a 1.5V source and then as a 7.5V source for various ohmmeter circuits. It is entirely possible that the meter movement had been replaced at some point in time with a Series 5 meter, which would account for the difference, but the instrument is clearly not a true Series 5 model.

It should be noted that Simpson actually anticipated the need to replace the negative ***"D"*** cell terminal contact at some point, because they supplied a spare contact, nestled into the 9-volt battery pocket. This spare terminal is just visible in the **Figure 4** photo of the working side of the instrument. I chose ***not*** to use this spare contact, leaving it there against a future need. Instead, I fabricated a new contact from some sheet copper that I had on hand, which worked out nicely.

I installed a fuse of the correct type and value, placing a second such fuse into the spare fuse holder next to the fuse location. Next, I installed a fresh 9-volt battery and ***"D"*** cell, and set out to test the remainder of the unit. With the battery situation sorted, the ohmmeter functions all worked perfectly. The same could not be said for the voltage and current sections of the instrument. No matter how hard I tried, I simply could not get the unit to calibrate properly, and I found some other anomalies as well. For example, when inputting a DC voltage into the ***OUTPUT*** jack, a voltage was indicated on the meter. This should not happen, as all current through that port passes through a 0.1µF 400V capacitor whose sole purpose is to pass AC while blocking DC. That is why the simple test of applying a DC voltage there is so diagnostic - DC ***should not*** get past the capacitor and into the instrument. When it does, it is obvious that the capacitor has failed in a leaky condition and must be replaced.

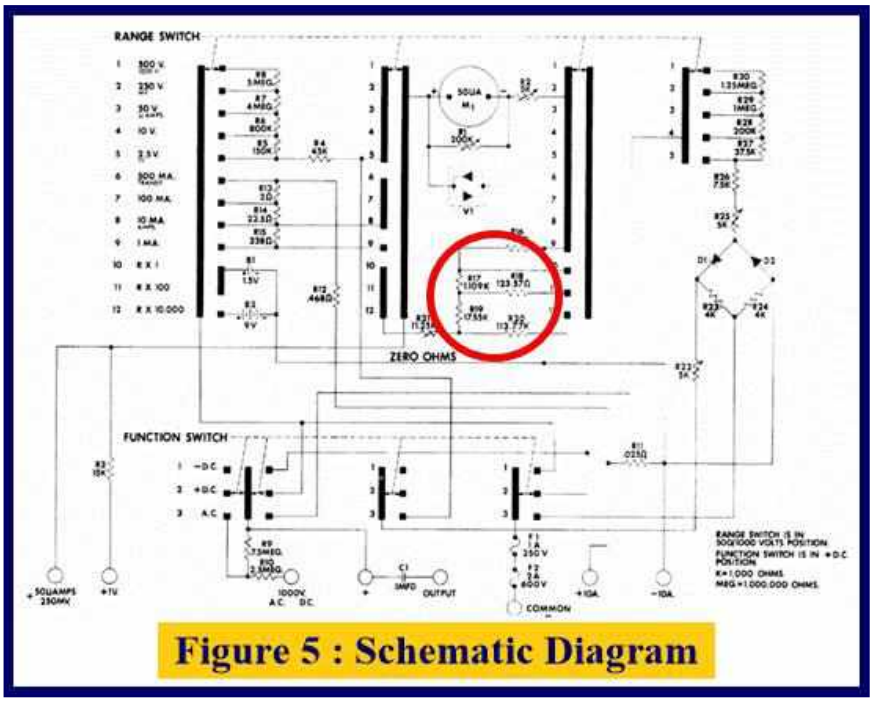


Figure 5 : Schematic Diagram

Further problems were detected during the calibration process, when two failed resistors were identified. These are precision resistors used to establish the specific voltage ranges measured and reported by the meter. When these resistors change value over time, the meter errors that result can be both confusing and dangerous. Thus, those two resistors, **R17 and R20 (Figure 5 - See Red Circle)** both needed to be replaced. Once the resistors were replaced, the calibration went well and I was quickly able to bring the instrument back into top operating condition.

With all functions operating normally and all evidence of the ***"D"*** cell corrosion gone from the unit, I felt comfortable buttoning it up and returning it to its owner. These instruments, when properly cared for, can have extremely long useful lives, and will serve the user well for any and all measurements necessary for basic troubleshooting of electric and electronic circuits. Remember - before the invention of the DVOM, these analog meters were the everyday workhorses on the technician's bench unless a meter with a higher input impedance was required, at which point the technician would switch over to the less portable VTVM.

See you next month…

New QRZ Award: USA250 (The 250th Anniversary of the United States of America)

In 2026, the United States of America will commemorate a historic milestone — the **250th anniversary of its founding.** To honor this once-in-a-lifetime event, QRZ is proud to introduce a special commemorative operating award: **USA 250**.

The **USA 250 Award** is available to amateur radio operators **worldwide** and is granted upon the successful confirmation of **250 two-way contacts with US-based amateur radio stations** made during the 2026 calendar year.

Award Requirements

To earn the USA 250 Award, operators must:

- Make **250 confirmed QSOs** with **US-based amateur radio stations** (operating from DXCC entities 291, 6, 110, 9, 103, 202 or 285)
- Contacts may be made on **any band** and **any mode,** Transmission may not make use of a relay, repeater or internet linking.
- Licensed operators in **any country** are eligible
- QSOs must take place **during the 2026 calendar year only**
- The operating window opens at **00:00 UTC on January 1, 2026**
- All contacts must be **confirmed on QRZ Logbook** (imported LoTW confirmations accepted)
- The official rules can be found here **https://www.qrz.com/page/qrz-operating-awards**

Operating Period

January 1, 2026 00:00:00 – December 31, 2026 23:59:59 (UTC)

Volunteer Appreciation Awards
Awarded To Those Members For Their Outstanding Service & Continuing Support Of The Club

December 2020
- Thomas Litle Sr AB2YG SK

January 2021
- Charlie Olinda N2SRQ

August 2021
- Robert Demola KD2GFL

September 2021
- David Paster AC2IQ

September 2022
- Chris Prioli AD2CS

November 2023
- Anthony Cerami N2OAC
- John Hill W2HUV
- Chris Kelly KC2PC
- Gary Mirkin WA3SVW
- Earl Moore KC2NCH
- Kathy Romeo
- Mike Thompson KG4JYA
- Carl Wittig N2CRW

April 2024
- Tony Starr K3TS

August 2024
- Greg Ciraula K3GC
- Steve Farney W2SEF
- Marc Federici WM2Y
- Gary Reed N2QEE

December 2024
- Doug Dersch KD2VQA
- Lee Halele WA2LH

December 2025
- Jonathan Romeo
- Nancy Smith

Thank You To All Our Members

Who Support The Club!

NTS Resources

The National Traffic System® (NTS) is a network of Amateur Radio operators who move information during disasters and other emergencies. General messages offering well wishes also move through the NTS to help test the system and to help Amateur Radio operators build traffic handling skills. While the NTS is primarily set up to serve the United States and Canada, it is possible to move traffic internationally through the NTS through various local, regional, area, and international network connections.

- **NTS 2.0 : https://nts2.arrl.org**
- **NTS Manual : https://www.arrl.org/nts-manual**
- **NTS Methods and Practices Guidelines Table of Contents : https://www.arrl.org/table-of-contents-nts-methods-and-practices-guidelines**
- **Handling Instructions : https://nts2.arrl.org/hx-handling-instructions**
- **Numbered Texts : https://nts2.arrl.org/numbered-texts**
- **Form Encoding Rules for Form : https://nts2.arrl.org/form-encoding-rules-for-forms**

A *Club* that goes *above* and *beyond* for their communities and for Amateur Radio, is what defines a *Special Service Club (SSC).*

They are the leaders in their Amateur Radio communities who provide active training classes, publicity programs, and actively pursue technical projects and operating activities.

GCARC has been an ARRL Affiliated Club since February 4, 1960 and an SSC since April 2010.

GCARC VE Team : 2026 License Exam Monthly Summary

	Technician Class		General Class		Amateur Extra Class	
	Monthly	YTD	Monthly	YTD	Monthly	YTD
January	1	1	0	0	0	0
February	0	1	0	0	0	0
March	1	2	0	0	1	1
April	2	4	0	0	0	1
May	1	5	1	1	1	2
June	2	7	0	1	1	3
July						
August						
September						
October						
November						
December						

Club Member DMR IDs

Club Member	DMR ID
W2MMD Clubhouse	3198604
Michael Beach KF2EM (KE2HRH)	3222203
Jim Blose KD2TAT	3211628
Cole Bonner KE2GYA	3221097
Joshua Boylan KE2FSC	3216140
Alex Calabrese WA2ADS	3100583
Chuck Capasso WB2PGE	3169781
Todd Cecilio KA2YNT	3169458
Anthony Cerami N2OAC	3202759
Mark Clark N3QMJ	3102110
Norm Coltri K2NRC	3183851
Holden Correia-Fisher KD2JPV	3104911
Mike Covaleski N2MMC	3134855
Walter Coward WX2E	3166863
Doug Dersch KD2VQA	3193630
Daniel Devlin KC2GYU	3210633
Carmen DiCamillo KA3WYV	3221262
Thomas Distelcamp Sr KC2GYC	3110869
Glenn Dougherty N2YIO	3161836
Adam Duncan W3DUN	3202691
Herb Dyer KT2Y	3134907
Harry Elwell AD5TT	3128498
Misael Fernandez Jr KE2EBL	3214756
Joseph Fisher KC2TN	3134720
James Foster W3JNF	3142117
Karl Frank W2KBF	3146716
Joseph Gadoury N2JJG (KE2AKT)	3196520
Glen Guenther KE2BUO	3202079
Melissa Guenther KE2BWZ	3202496
Gary Hewitt N2WHV	3134654
Paul Kaplan N2FOB	3134796
Chuck Lanard KD2EIB	3134298
Virginia Macrie KA2ZZA	3219039
Darren Malone KD2ALQ	3215227
Dean Marzocca N2TNN	3206232
Bill McCourt WF1L	3152173

Club Member	DMR ID
Scott McNutt N3ADP	3189434
Gary Mirkin WA3SVW	3165494
Paul Molinari N2MVK	3221792
Earl Moore KC2NCH	3210340
John Murrow KD2NHK	1134122
John Newman WB4YLM	3213273
Phil Nunzio WA3RGY	3134336
John O'Connell K2QA	3110610
Robert Pantazes W2ARP	3157208
Sheldon Parker K2MEN	3214037
Jonathan Pearce WB2MNF	3163415
Michael Pecorini K2MRP	3132996
Michael Pentimall KC3VTF	3203601
John Price III KD2QYC	3123583
Chris Prioli AD2CS	3195449
Nicholas Reigel KE2DCD	3128983
Michael Resnick N2WOQ	3215856
William Robinson KD2ANM	3134257
Frank Romeo N3PUU	3134935
Terry Rossi N2LQH	3183681
Len Rust III W2LJR	3186225
Len Rust IV K2LJR	3196243
Dave Sheppard W2PAX	3112666
Cory Sickles WA3UVV	1142052
James Simeone KC2AOF	3134848
Stan Slachetka WA2JRZ	3213904
Court Smith KD2SPJ	3186243
Jackson Snyder AI2D	3164371
Rich Subers W2RHS	3204316
David Swartout KC3TGB	3198155
Anthony Vece W2AJV	3214797
Matt Wilson K2MFW	3134607
Bill Wood KD2OSJ	3197459
Jim Wright N2GXJ	3215168
John Zaruba Jr K2ZA	3134331
New Entries As Of 06/20/2026	

DMR Configuration Sequence

1. Obtain and Configure DMR ID :
   - https://www.radioid.net
2. Download Contact List :
   - http://www.dmrcontacts.com
3. Identify Repeater or Hotspot :
   - https://www.repeaterbook.com
4. Define Talk Groups
   - Numerical ID
   - Text Name

https://brandmeister.network/?page=talkgroups

5. Create Channel
   - Select Number
   - Assign Name
   - Select DMR ID
   - Assign Frequency
     - Transmit
     - Receive
     - Bandwidth
   - Power
   - DMR Mode (Simplex/Repeater)
   - TX Permit (Channel Free)
   - Assign Talk Group
   - Assign Color Code
     - Agreed Upon with Other Users
   - Assign Time Slot
   - Agreed Upon with Other Users
6. Create Zone
7. Add Channels to Zones
8. Configure Features
9. Upload Code Plug
10. Upload Contact List

If you recently changed your callsign, contact idteam@dmr-marc.net to have your DMR ID transferred to your new callsign.

For more information, DMR links, and W2LJR's DMR presentations, go to : https://gloucestercountyarc.weebly.com/dmr.html

8th Annual ARRL SNJ Section Convention

GLOUCESTER COUNTY AMATEUR·RADIO·CLUB NEW JERSEY

Presented By The

Gloucester County Amateur Radio Club

W2MMD

Celebrating Our 67th Year

HamFest.W2MMD.org

Open To The Public At 8:00 AM : *Rain or Shine*

48th Annual HamFest : Sunday, October 11, 2026

Gloucester County ARES News : July 2026

By Steven Farney W2SEF - sef001@comcast.net
Gloucester County Emergency Coordinator

Hi Folks.

I want to thank **Bob Keogh KD2NEC**, **Doug Dersch KD2VQA**, **Court Smith KD2SPJ**, **Angela Metzger KE2DRJ**, and **Craig Metzger KE2GNU** for their help with participation in the ARES/ Red Cross FIFA exercise on Saturday, June 13, 2026. I felt that the exercise was educational from several different perspectives.

1. The Princeton repeater (442.650) was as full quieting as our repeater is at my QTH. I had no problem communicating using my Yaesu FTM-7250 and my dual band Ringo-Ranger, on full power. We made contact with 15 stations using the Princeton repeater during the 2 hour exercise.
2. I tried to access the Fairfield (Northern New Jersey) repeater (146.895) without any luck. Part of the exercise was to find out which repeaters being used we could access.
3. Communications on 60m (5403.5) between Long Beach Island and my QTH was iffy at best. Audio kept fading in and out, but I did hear the callsigns of two exercise participants.

Watch for the Simulated Emergency Training (SET) scheduled in the fall.

73 for now,
Steve W2SEF GCEC

ARES Resources (Updated as of January 2026)

ARRL ARES Registration Form July 2004: https://bit.ly/3Ae2pCf
ARES Manual March 2015 [PDF] : https://bit.ly/3iUhJLQ
ARES Field Resources Manual August 2019 [PDF] : https://bit.ly/4qDmOWb
ARES Standardized Training Plan Task Book July 2024 Ver. 3.0 [Fillable PDF] : https://bit.ly/4dToEes
ARES Standardized Training Plan Task Book July 2024 [Word] : https://bit.ly/4heLXSU
ARRL ARES Plan July 2025 : https://bit.ly/4pOZwwl
ARRL Emergency Communications Training : http://bit.ly/3J2gMMf
FEMA 2023 National Preparedness Report : https://bit.ly/3YrPWnY
Southern New Jersey Section Emergency Operations Plan 2023.PDF : https://bit.ly/3YqMdHb
ARRL ARES Monthly Newsletters : https://bit.ly/408OV5d

The Amateur Radio Emergency Service® (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible to apply for membership in ARES. Training may be required or desired to participate fully in ARES. Please inquire at the local level for specific information. Because ARES is an amateur radio program, only licensed radio amateurs are eligible for membership. The possession of emergency-powered equipment is desirable but is not a requirement for membership.

If you are interested in learning more about the Gloucester County ARES Program or becoming an ARES member, please contact Steve Farney W2SEF at sef001@comcast.net.

ARRL Membership Commission Program

By Chris Prioli AD2CS - chris@ad2cs.com - www.ad2cs.com

As some of you may already know, the ARRL has upped the ante on one of their long-standing programs, the Affiliated Club Membership Commission program. What this means to us is that we as an Affiliated Club have access to an improved revenue stream that costs us nothing but a little bit of paperwork and cooperation. The Membership Committee will handle the paperwork, but we do need the cooperation of all Club members to make this a reality.

Here is how it works. The ARRL will pay a commission to the GCARC for every new ARRL membership and for every ARRL membership renewal that is processed through the Membership Commission program. The payments are at a rate of **$5.00** for each renewal and **$20.00** for each new membership application submitted. This could equate to a sizable income for our Club if everyone cooperates.

All that you have to, as an existing ARRL member, is to renew your League membership via a renewal form that the GCARC Membership Committee will provide to you, completing the form and returning the form with the renewal payment to our Membership Committee. We will then bundle all of the applications received in a given month and submit them to the ARRL together with a special cover form competed by the Membership Committee. The ARRL will then send a check for the agreed commission amount to our Club. Renewals can be submitted as much as sixty days before expiration. If you are unsure of your expiration date, drop me an email and I can tell you when your ARRL membership expires.

As a tentative new member… and 45% of our membership does not currently belong to the ARRL… the process is similar. Our Membership Committee will provide you with a League membership application, which you will then complete and return to us together with your payment. We will then submit those applications together with the required cover form to the ARRL, who will again send a check for the commission to our Club.

If you are not currently an ARRL member, I strongly recommend that you join the League. The ARRL is our - Amateur Radio's - ONLY voice in Washington when it comes to lobbying for the hobby and protection of Amateur Radio against encroachment by other interests. We NEED to support the ARRL in order to protect our chosen hobby, and they are quite effective and successful in their efforts to protect and promote Amateur Radio.

Many of you will be renewing your ARRL memberships anyway, so why not do it through this program and let GCARC benefit a little bit from your renewal?

The Amateur's Code By Paul M Segal, W9EEA (1928)	
The Radio Amateur is :	
Considerate	**Never knowingly operating in such a way as to lessen the pleasure of others.**
Loyal	**Offering loyalty, encouragement and support to other amateurs, local clubs and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.**
Progressive	**With knowledge abreast of science, a well built and efficient station, and operation beyond reproach.**
Friendly	**With slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.**
Balanced	**Radio is an avocation, never interfering with duties owed to family, job, school or community.**
Patriotic	**With station and skill always ready for service to country and community.**

Revolutionary War POTA Event - July Update

By Stan Slachetka WA2JRZ

Hard to believe that it is the middle of June and Field Day is only a couple of weeks away.

It also is seven weeks away from our first Revolutionary War POTA activation at the Historic Hancock House. Although the activation at Fort Mott is at the end of September, that will be here before we know it too.

There are a number of important tasks that we need to accomplish to make both of these activations a success, some of which were listed in my prior email. As expected, the ones associated with the Hancock House activation are the most immediate.

POTA Prep Meeting : Wednesday, July 22, 2026 @ 1800 Hours

- The POTA Prep Meeting is July 22, 2026. However, we will keep you informed about any important takeaways and coordination needed for the activation at the Hancock House.
- I will be coordinating with **John Zaruba K2ZA**, on the agenda for the meeting. We will circulate it to the Club members prior to the meeting.

Hancock House : Saturday, August 1, 2026

- **Most immediate** : **Prepare a contact confirmation certificate**. I will be coordinating with **Jon Pearce WB2MNF** to craft a contact confirmation certificate to send to the hams we contact. This will include a picture of the Hancock House and some information about its history.
- **Second most immediate : Prepare a member sign-up form**. We need to have a member sign-up form for both the Hancock House and Fort Mott activations. I will coordinate with **John O'Connell K2QA** on that.
- **We need to identify equipment and antennas :** I anticipate that we will have a variety of gear brought by the Club members, but we will need to confirm the equipment and modes.
- **We will need signage and information** about ham radio and the Club for the public.
- **Food :** As mentioned in my last email, I anticipate that we will not be doing any grilling at the Hancock House. We probably should plan for sandwiches, snacks, and drinks brought in by coolers. (No alcohol!) We will have more information on that shortly.
- **https://dep.nj.gov/parksandforests/state-park/hancock-house**

Fort Mott : Saturday, Sunday, September 26-27, 2026

- **Most immediate :** We need to get back to **Andy Grant** at Fort Mott with the information they need to prepare our special event QSL card.
- **Go back to the bunker** to scope out equipment and antenna locations.
- **As noted above, prepare a member sign up form.**
- **Later in the Summer but before the event :** Identify equipment and figure out shifts.
- **We will need signage and information** about ham radio and the Club for the public, including information about the history of ham radio, possibly including some vintage gear if practical or pictures.
- **Food** is going to be available at the Historic Soldiers event, so we don't need to worry about that.
- **https://dep.nj.gov/parksandforests/state-park/fort-mott-state-park**
- **https://soldiersweekend.com**

Other Items

- Coordinate with **Angela Metzger KE2DRJ** on student attendance from her STEM class.
- Discuss and establish a plan for publicity for both events

I have attached a couple of slides that I had planned to send to Jon for our last Club meeting, but did not get to him on time. I will be posting these on our Discord channel shortly.

Revolutionary POTA Event - Continued on page 27

Revolutionary POTA Event - Continued from page 26

I will try to set up a Zoom meeting before the July Club meeting to go over these tasks in more detail and begin our preparation for the POTA prep meeting.

Revolutionary War POTA Event

Upcoming Dates

Wednesday July 22 [New Date] : POTA Presentation and Prep Meeting at the monthly **Dinner @ the Clubhouse**

August 1: Historic Hancock House in Hancock's Bridge, Salem County.

September 26 and 27: Fort Mott in Pennsville, NJ.

- Historic Soldier's Weekend sponsored by the Fort Mott Park Association
- Special event call **W2M**

October: Batsto Village in Wharton State Forest.

Stan WA2JRZ

22nd Annual Event
HISTORIC SOLDIERS WEEKEND
SEPTEMBER 26 & 27, 2026
Fort Mott State Park • Pennsville, NJ
454 Fort Mott Road • Pennsville, NJ 08070

Fort Mott

W2M POTA Bunker

Historic Hancock House

3 Front Street
Hancock's Bridge, NJ 08038
https://dep.nj.gov/parksandforests/state-park/hancock-house/

- Saturday August 1
- Set up 8 am
- Operation from 9 am to 4 pm
  - Members can attend any time during the day
  - Weather monitors
  - Parking available on Front and New Streets
- SSB/CW/FT8
- Front lawn area
- Tours of the house and cabin
- Demonstrations

Revolutionary POTA Event - Continued on page 28

Revolutionary POTA Event - Continued from page 27

454 Fort Mott Road
Pennsville, NJ 08070
https://dep.nj.gov/parksandforests/state-park/fort-mott-state-park/

- Historic Soldiers Weekend https://soldiersweekend.com/
- Saturday September 26 & Sunday September 27
- Special event call **W2M**
- Operation during both days of the event
- SSB/CW/FT8
- Bunker in the central portion of the event area
- Coordination with Fort Mott staff on set up
- Re-enactors and special demonstrations
- Ferry to historic Fort Delaware on Pea Patch Island and to Delaware City, Delaware

Gloucester County Amateur Radio Club Elmers

We are always looking for some Club Elmers. If you would to add your name to the Elmer's List, send your specialty to w2mmdgcarc@gmail.com. Here is what we have so far :

- **Tony Starr K3TS : Antenna Construction; Contesting; CW Help and Training**
- **Ken Bozarth KN2U : Antennas**
- **Karl Frank W2KBF : Digital Messaging (FLDIGI, WinLink)**
- **Lenny Rust W2LJR : DMR Radios & Programming; VOIP; POTA; 3-D Printing**
- **Ron Block NR2B : Lightning Protection & Grounding**
- **Chris Prioli AD2CS : Kit Building; Antenna Building; Radio Programming; PC and Electronic Troubleshooting; Ham Radio Licensing & Studying; Local & Remote W2MMD HF Station Operation; Training & Support**
- **John Zaruba Jr K2ZA : Yaesu System Fusion Radio Programming; POTA; SOTA; CW Learning & Operating; 3-D Printing**
- **Jerry Barnish K2EAB : Radio Astronomy**
- **Mike Thompson KG4JYA : Radio Astronomy; VARA (HF and FM); WinLink**
- **Steve Farney W2SEF : WSJT-X; FT-8; LoTW; TQSL; Grid Square**
- **Gary Mirkin WA3SVW : FLDIGI; MMSSTV**
- **Jon Pearce WB2MNF : Satellite Communications; DMR; GD77; WPSD**
- **Frank Romeo N3PUU : Construction; Plumbing; Electrical; Fabrication; Jack-Of-All Trades**
- **Rich Subers W2RHS : 3-D Printing**
- **Dave Sheppard W2PAX : National Traffic System**
- **Bob Pantazes W2ARP : How To Properly Manage QSL Cards**

2024-2028 Element 4 Amateur Extra Class License Question Quiz

This month we continue with Subelement E6 Circuit Components (6 exam questions - 6 groups).
(***Answers on last page***)

E6B01
What is the most useful characteristic of a Zener diode?
A. A constant current drop under conditions of varying voltage
B. A constant voltage drop under conditions of varying current
C. A negative resistance region
D. An internal capacitance that varies with the applied voltage

E6B02
Which characteristic of a Schottky diode makes it a better choice than a silicon junction diode for use as a power supply rectifier?
A. Much higher reverse voltage breakdown
B. More constant reverse avalanche voltage
C. Longer carrier retention time
D. Lower forward voltage drop

E6B03
What property of an LED's semiconductor material determines its forward voltage drop?
A. Intrinsic resistance
B. Band gap
C. Junction capacitance
D. Junction depth

E6B04
What type of semiconductor device is designed for use as a voltage-controlled capacitor?
A. Varactor diode
B. Tunnel diode
C. Silicon-controlled rectifier
D. Zener diode

E6B05
What characteristic of a PIN diode makes it useful as an RF switch?
A. Extremely high reverse breakdown voltage
B. Ability to dissipate large amounts of power
C. Reverse bias controls its forward voltage drop
D. Low junction capacitance

E6B06
Which of the following is a common use of a Schottky diode?
A. In oscillator circuits as the negative resistance element
B. As a variable capacitance in an automatic frequency control circuit
C. In power supplies as a constant voltage reference
D. As a VHF/UHF mixer or detector

E6B07
What causes a junction diode to fail from excessive current?
A. Excessive inverse voltage
B. Excessive junction temperature
C. Insufficient forward voltage
D. Charge carrier depletion

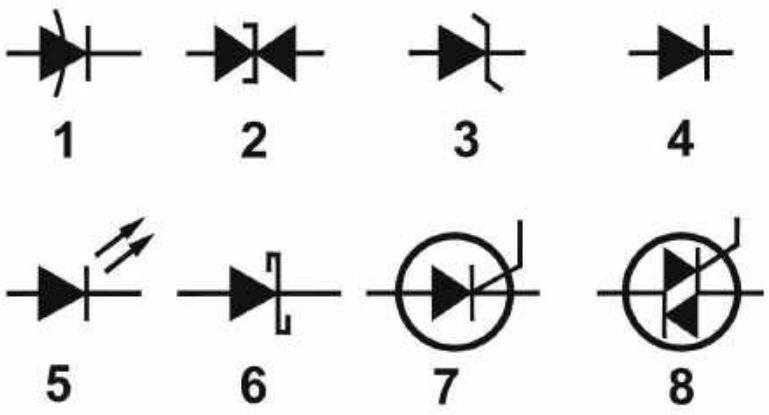
Element 4 Amateur Extra Class Quiz - Continued on page 30

E6B08
Which of the following is a Schottky barrier diode?
A. Metal-semiconductor junction
B. Electrolytic rectifier
C. PIN junction
D. Thermionic emission diode

E6B09
What is a common use for point-contact diodes?
A. As a constant current source
B. As a constant voltage source
C. As an RF detector
D. As a high-voltage rectifier

E6B10
In Figure E6-2, which is the schematic symbol for a Schottky diode?
A. 1
B. 6
C. 2
D. 3

Figure E6-2



E6B11
What is used to control the attenuation of RF signals by a PIN diode?
A. Forward DC bias current
B. A variable RF reference voltage
C. Reverse voltage larger than the RF signal
D. Capacitance of an RF coupling capacitor

From The Help Desk - July 2026

By Chris Prioli AD2CS - chris@ad2cs.com - www.ad2cs.com

Note : This is an ongoing series of related articles that will each take a look at some facet of radio selection, installation, or operation as suggested by actual questions received from Club members or other amateur operators.

Q : I have a couple of hundred linear feet of rain gutter on my house, and I would like to use some of the gutter length to make ***"stealth"*** antennas. How can I go about doing this?

A : The main thing that you will need to do in order to ***"carve"*** your rain gutter length up into proper antenna-length sections is to come up with a means of isolating each cut section from its neighboring section of gutter. Let's suppose that you want to make a gutter antenna for the 40-meter band. The job will involve cutting the overall gutter length into segments of the proper length, and then isolating those segments, sealing them to maintain gutter functionality, and then attaching the feedline to the segments. Finally, you will most likely end up needing a matching transformer as well. Let's look at the various steps required to do this job.

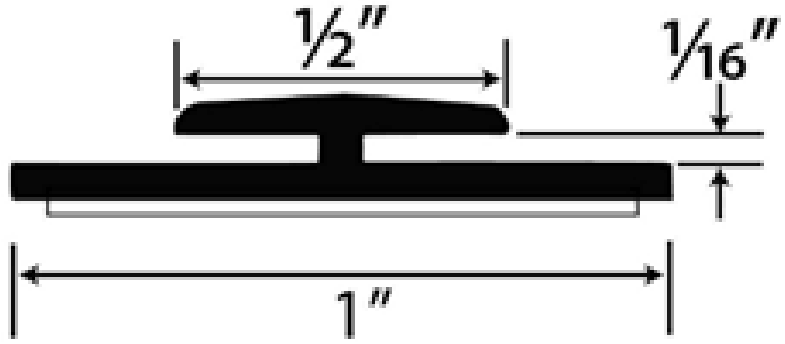


Figure 1 : H-Channel Cross-Sectional View

Before we begin, we must gather the requisite supplies and tools. For supplies, you will need your feedline, some RTV sealant, some flexible H-channel, some thin ***(1/64" to 1/16" thick)*** plastic sheets roughly ***2" x 12"*** in size, ***#8*** or ***#10*** ring terminals, machine screws with KEPS nuts, some sandpaper, and some liquid electrical tape. For tools, you will need a tape measure, a saw (either a hacksaw or a reciprocating saw will do, though a Dremel rotary tool with a saw blade or cutoff wheel is actually the best option), a flexible putty knife, a portable drill motor, and a set of twist bits. Of course, you will need your ladder and a source of electrical power if you are using a corded saw and/or drill motor. Ultimately, you will also want an antenna analyzer and at some point, a matching transformer, which you may end up constructing later on.

Let's look more closely at the two ***"strange"*** bits of supply material that I itemized above - the H-channel and the plastic sheets. These only seem strange because you don't know where I am going with them yet. Both items are available online from Amazon. The flexible plastic sheets are 8" x 12" x 0.040" thick, and will need to be cut to size. These sheets, found on the Amazon website at : **https://www.amazon.com/Plastic-Flexible-Materials-Handicrafts-Decoration/dp/B0CCMNPWGW**, are used to insulate the gutter from the drip-edge flashing that is often located above the gutter. The sheets will be slipped in between the existing drip-edge flashing and the upper edge of the gutter rear member, so as to prevent contact between the antenna segments of the gutter and the drip edge. Note that if the drip edge is vinyl, it is ***not*** necessary to insulate it from the rain gutter. The H-channel, which is not truly an **H shape (Figure 1)**, is meant to be cut to the proper lengths, as three pieces, so as to be slipped into the cuts between the gutter segments. The channel is found at : **https://www.amazon.com/Outwater-Plastic-Material-Moulding-Adhesive/dp/B07N4B15M5**. Both of these plastic items are black in color, but they can be painted to match the gutter afterwards if so desired, though care must be taken to avoid paints with any metallic compounds in their formulation. Now, on to the build details.

From The Help Desk - Continued on page 32

From The Help Desk - Continued from page 31

Suppose we are shooting for the center of the overall 40-meter band, or 7.150 MHz. The math, taken in feet, looks like this :

$$\lambda = \frac{984}{7.150} = 137.622\ feet$$

Thus, a **half-wave (λ/2)** antenna would need to be 68.811 feet, making each segment 34.4 feet long. This equates to 34 feet, 4-3/4 inches in length. This, in turn, should be derated by about 5% to account for the greater density of the metal than that of a vacuum or even of air. Ninety-five percent of the calculated segment length above brings us to a final adjusted segment length of 32 feet, 8-1/4 inches. OK - identify the center point, where the feedline will attach, and make sure that you have adequate gutter length on each side of that point for the antenna that you want to construct. If all is good, use your saw to make a cut completely through the gutter, from the front all the way through the back face and edge of the gutter. If there is drip-edge flashing overlapping the top of the gutter, it is best to avoid cutting that, but we will need to insulate the drip-edge flashing from the gutter later on, as discussed above regarding the plastic sheets. Now, measure and mark the gutter at the proper distance from the first cut to lay out the antenna segments, and then cut them in the same manner as the first cut. Next, we will need to isolate the segments from each other and from the rest of the gutter.

This is where the H-channel comes in. Measure as best you can the length of channel that is required to fill in between the gutter segments, at the back of the gutter, across the bottom of the gutter, and up the front of the gutter, cutting three sets of these pieces (one for each cut in the gutter). Slip the channel sections in between the gutter segments with the wide face to the outside. These strips will support the gutter segments as well as maintaining separation between them electrically. Use the sandpaper to clean the inside surfaces adjacent to the H-channel strips, scrubbing down to bright metal. This is necessary to make it more likely that the RTV sealant will bond to the metal. Clean the sanding dust out of the gutter, and apply sealant to the joints, spreading it evenly with the flexible putty knife. This will allow the gutter to continue to do its primary job of handling the rainwater runoff from the roof of the house without leaking at the cut locations.

Now it is time to isolate the rain gutter from any metallic drip-edge flashing that may be present. Do this by cutting the 8” x 12” plastic sheets into 2 x 12” strips. Then, slip a strip in between the top of the rain gutter and the bottom of the drip edge, push the strips in as far as you can. Ideally, the strips will fit under the drip-edge and be trapped in place behind the vertical lip of the drip edge flashing. It may be necessary to cut a slot in the strip at the location of each nail that secures the drip-edge flashing to the roof in order to slide the plastic strip into place. Do this for the entire length of the antenna segments defined in your antenna design, thus ensuring that any metallic drip-edge flashing cannot come into contact with the metallic rain gutter within the length of the antenna.

OK - now comes the attachment of the feedline to the gutter. Prepare the end of the feedline by stripping the insulation from the wire as needed. If the feedline is coaxial cable, be sure to strip enough of the outer jacket to permit separation of the shield braid and the center conductor far enough to connect them to the two gutter segments. Using the sandpaper again, remove some paint from the gutter front or lower face in the locations where the feedline will be connected.

Install a ring terminal having a #8 or #10 ring onto each of the feedline wires. Then drill a hole in the sanded area of the gutter at each feedline attachment point. Finally, using a machine screw and KEPS nut for each terminal, secure the ring terminals to the gutter segments. Apply some liquid electrical tape compound to each of the screw attachment points and the feed line wires.

That brings us to the matching transformer. To accomplish this task, you will need to start out by measuring the impedance of the rain gutter antenna. Using that number and a targeted 50-ohm value, do some basic mathematics to determine the impedance ratio that is needed. For example, if the gutter antenna measures out to be 768 ohms of impedance, a 15:1 impedance matching transformer is required. Remember that the impedance and the turns ratio ***are not the same!***

From The Help Desk - Continued on page 33

From The Help Desk - Continued from page 32

Consider that a transformer with a 3:1 turns ratio provides a 9:1 impedance ratio. The impedance ratio is the square of the turns ratio, or, coming at it from the opposite direction, the turns ratio is the square root of the impedance ratio. Thus, the 15:1 impedance ratio of our example above ends up at a 3.87:1 turns ratio. Such a transformer would most likely need to be home-brewed, but that it not an insurmountable task.

I hope that this article helps to improve your understanding of rain gutter antenna construction. Hopefully, it will also encourage you to experiment a little bit with new and different ways of designing and building custom home-brewed antennas. Overall, it should help to remove some of the mystery, hesitation, and fear of the unknown when it comes to this type of stealth antenna.

Volunteer Monitor Program Report - April 2026

The Volunteer Monitor (VM) Program is a joint initiative between ARRL and the FCC to enhance compliance in the Amateur Radio Service. This is the April 2026 activity report of the VM Program.

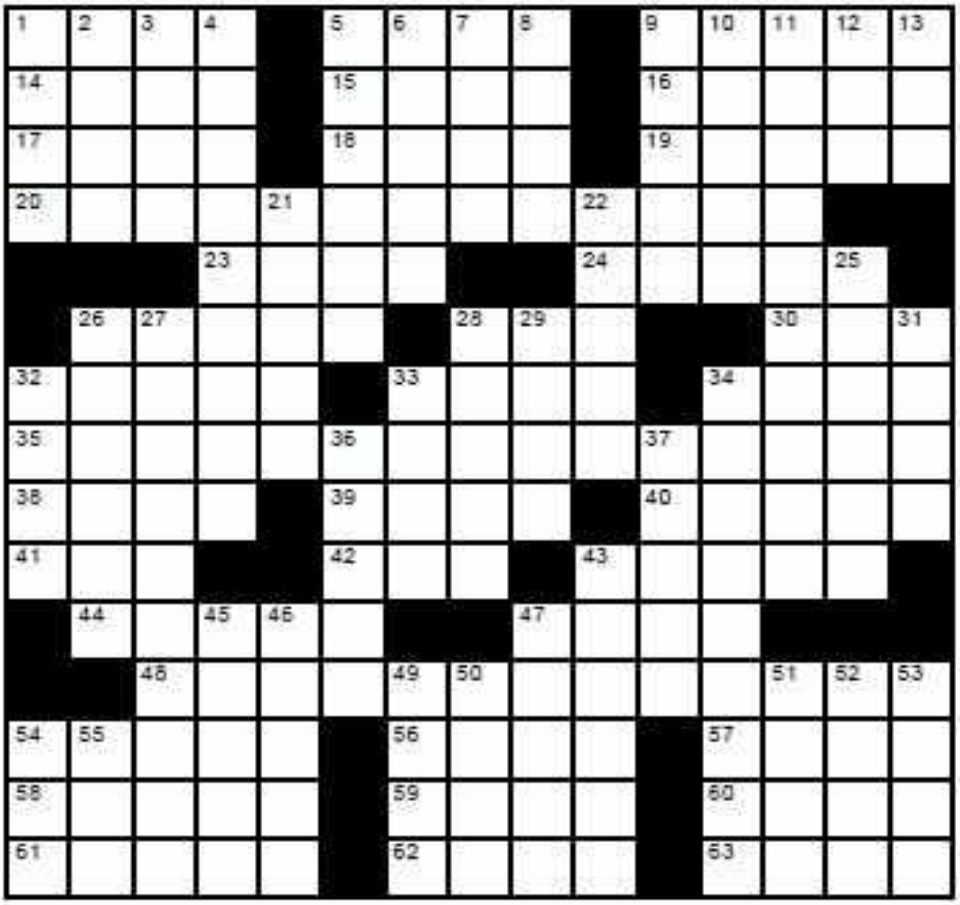
- An operator in Texas was issued an Advisory Notice concerning operating a repeater on an expired license. The matter was resolved informally by telephone.
- Retail chain stores in Appleton and Neenah, Wisconsin, were issued Advisory Notices concerning unlicensed operation on 430.225 MHz, which is allocated to the Amateur Radio Service.
- An operator in Texas was issued an Advisory Notice concerning wide signals and splatter on 14.213 MHz. The signals extended from 14.210 to 14.219 MHz.
- A repeater owner in California was cautioned about allowing non-amateurs in a volunteer fire watch group to use the repeater in non-emergency situations.
- Technician operators in Indiana and North Carolina were issued Advisory Notices concerning FT8 operations on 20 and 40 meters. Technicians have no operating authority on 20 meters, and only CW authority on 40 meters. This was the first use of the new automated FT8 monitoring system established for the VM Program to continuously monitor data frequencies.
- An operator in Vermont was issued a commendation for excellence in CW operation. An operator in Mississippi received a commendation for extra efforts to find a frequency for a W1AW/4 America250 operation. An operator in Florida received a commendation for exceptional efficiency and courtesy during a Parks on the Air® activation.
- There were two meetings with the FCC Enforcement Bureau concerning enforcement issues on 7.200 MHz. A presentation on the VM Program was given in person to the Forsyth Amateur Radio Club in WinstonSalem, North Carolina.

The totals for March 2026 monitoring were 1,735 hours on HF frequencies, and 2,167 hours on VHF frequencies and above, for a total of 3,902 hours.

Thanks to Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH

by Chris Codella, W2PA 10/29/2007

Propagation



Crossword Puzzle courtesy of https://www.w2pa.com/Home/articles/crossword-puzzles

Across

1. "WRTC grand ___" - working all 1x1 calls
5. Parts supplier McMaster-___
9. Sword handles
14. Digital music std.
15. Silent Key article, briefly
16. Fill with joy
17. Antenna restrictions might be on this
18. A craving for that last multiplier, say
19. Northern city with F call prefix
20. DXers' mood swings?
23. Decades over S9
24. Sharpens
26. Early term for static crash (1920's)
28. Nothing more, on CW
30. Ocean
32. "Air" for an early ham
33. ___ gum - a thickening agent
34. Hams xmit and rcv with them
35. The way, for signals
38. A non-radio bug
39. A hamfest of the Internet
40. Type of eel
41. Code inventor, for short
42. A comfortable ham shack might be here
43. Law school course
44. VK animal
47. Baseball glove
48. A six or ten meter DXer's hope
54. Do this on your meter to measure line voltage
56. Board here, for going /MM
57. Capacitor dielectric material
58. CW predecessor
59. Medical breakthrough
60. Vy much
61. DC power sources, briefly
62. Cluster item
63. Maine prefix, possibly

Down

1. Tiny parts (abbr.)
2. In ___ of (instead of)
3. Gulf of ___, off the 7O coast
4. Where not to change horses
5. VK was once a British one
6. Borders on
7. A microprocessor type, briefly
8. Non-military RATT
9. "____ radio" (testing, sometimes)
10. SETI call answerer
11. Calling CQ TEST one minute before the contest begins
12. Kind of logic ckt
13. You can do it with ATV
21. Lively
22. Boorish sort
25. Told someone to wait, on CW
26. Winning several contests in a row
27. It might increase your amplifier's blower speed
28. Holy book, in HZ-land
29. R-rated, maybe
31. Grayish
32. Oval insulators
33. Jeer
34. A contester, in a broader sense
36. Fragrant wood
37. Ham it up, in a way
43. FCC license, slangily
45. Like an untouched Heathkit
46. Freezes a digital VFO
47. Prefix with chip or wave
49. They feed DSP ckts., usually
50. Arrange, as hair
51. Prefix with watt
52. Clickable image
53. Gourmet cracker spread
54. Particularly slim type of AM
55. 3-land ARRL section

Answers on Page 52

Audio Dummy Load Build

By Chris Prioli AD2CS - chris@ad2cs.com - www.ad2cs.com

Figure 1 : CMS ADL-01 Audio Dummy Load

You know, every now and then it occurs that there is a piece of test equipment that would be nice to have, but either it is not readily available on the market or it is so cost-prohibitive that it might just as well not be available. That is when it is time to ***"roll your own"*** and solve the problem in true homebrew fashion. Right now, I am referring to an **Audio Dummy Load (Figure 1)** - a device that can be used to place a proper load on an audio amplifier for both pre- and post-repair testing of that amplifier.

I thought about the idea for a while and then decided that I would design and build a load device that would offer several different load impedances, selectable via a front panel switch, across two audio channels and through several different input connector types. I also wanted to incorporate oscilloscope take-offs with variable attenuation to provide a means of observing the amplified waveforms from the amplifier.

I settled on ***four ohms***, ***eight ohms***, ***twelve ohms***, ***sixteen ohms***, and ***twenty-four ohms*** as the design impedances to be installed refer to the **unit schematic diagram in Figure 2**. I also settled on 6.3mm (1/4-inch) monoaural jacks, 3.5mm (1/8-inch) monoaural jacks, RCA jacks, a 3.5mm (1/8 -inch) stereo jack, and stripped-wire spring clips as the various input connectors to be installed. I chose 50 kilohms as the attenuation potentiometer value, and 50-ohm BNC jacks as the oscilloscope lead connectors. The enclosure selected is a 7-3/4-inch x 6-1/4-inch x 2-3/4-inch two-piece steel over aluminum unit with a white-painted body and a black cover. A two-pole six-position rotary switch was chosen as the selector switch.

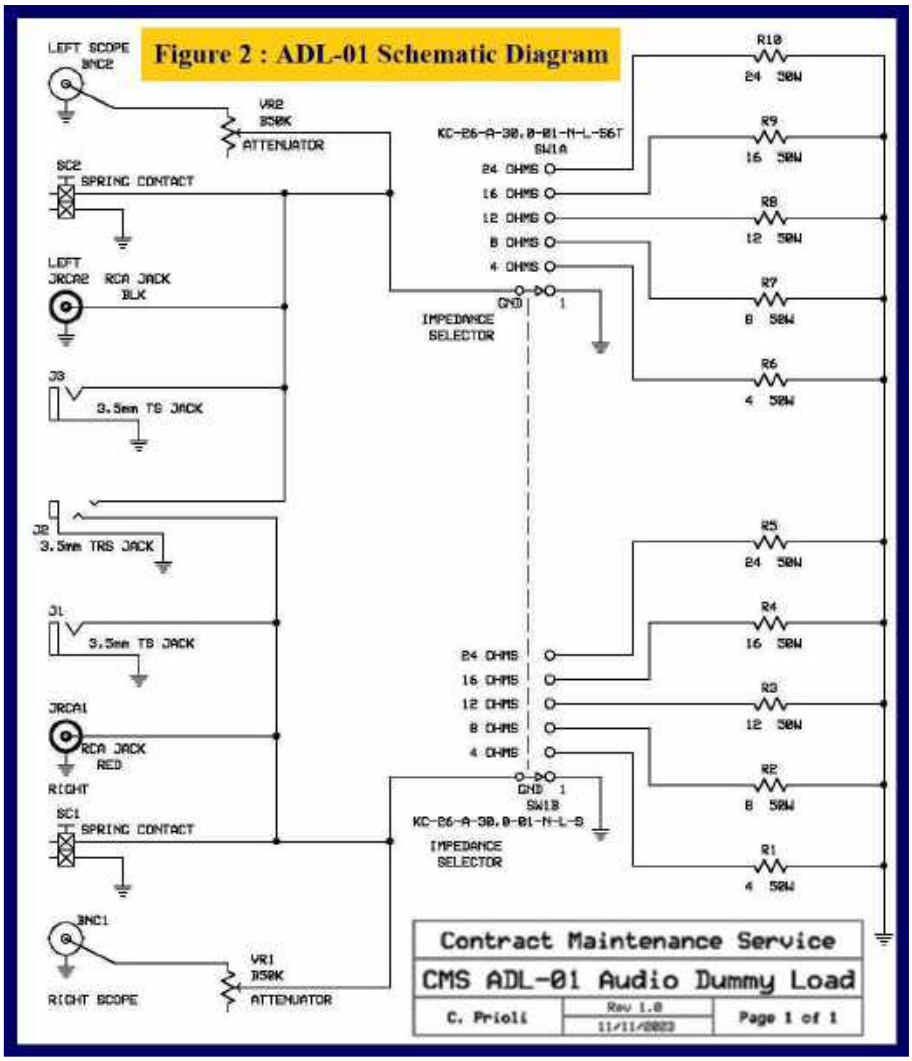


Figure 2 : ADL-01 Schematic Diagram

As a point of fact, the rotary switch selected is a variable-position two-pole switch. The number of positions to which the switch can be moved is determined by the position of a stopping ring that is installed at the bushing of the switch, underneath a toothed lock washer. The ***switch itself*** is actually a twelve-position switch with a thirty-degree index.

AD2CS Audio Dummy Load Build - Continued on page 36

It is the fact that it is a two-pole switch that makes six positions the maximum number of positions available for use. The specification of the ***"index"*** of a switch is a description of the number of degrees of rotation that the switch will move between each detent or position.

I had originally contemplated the installation of 2.5mm (3/32-inch) jacks, in monoaural for both left- and right-side inputs, and in stereo as a dual -channel input. After further thought, I decided to eliminate the 2.5mm jacks completely, both as a space-conscious decision and because that size is not very common in audio except for computer audio. I reasoned that if the need should arise to jack-in a 2.5mm connector, it could easily be accomplished through the use of an adapter or adapter cable, of which I have plenty on hand.

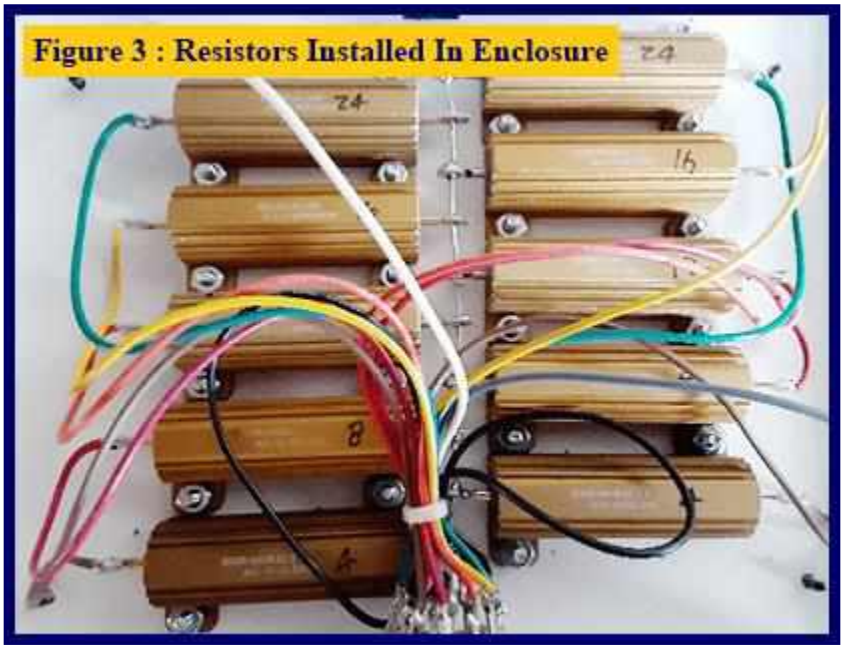


Figure 3 : Resistors Installed In Enclosure

Figure 4 : Rear Panel Wiring In Place

Figure 5 : Front Panel Wiring In Place

Front and rear panel labels were designed in CorelDraw! and then printed on a self-adhesive letter-size vinyl sheet. The labels were cut out of the sheet and then affixed to the front and rear panels of the lower half of the enclosure. Appropriately-sized holes were drilled at the various locations marked on the labels for that purpose, to provide for the installation of the various input connectors, selector switch, oscilloscope ports, and attenuator potentiometers. Ten resistors rated fifty watts each were selected for the loads, each of them having a tolerance of one percent. The resistors were installed to the floor of the enclosure **(Figure 3)** using 4-40 x 3/8 machine screws with split lock washers and 4-40 hex nuts.

All of the input connectors were installed to the holes drilled into the rear panel, while the selector switch, the potentiometers, and the BNC jacks were installed to the holes drilled in the front panel. A single ground bus wire was run through all of the resistors at the center of the enclosure, with a tail left at the rear for attachment to the input ground string. The front end of that ground bus wire was tied to terminals one and seven of the selector switch. The outer end of each of the resistors was then wired to the appropriate switch terminals, with the four-ohm resistors connected to switch terminals two and eight, and the remaining resistors connected in sequence to the remaining terminal pairs in sequence. Switch terminals A and B were each supplied with a length of 22 AWG hookup wire, which were left standing as the input leads to the selector switch.

All of the rear panel input connector ground terminals were tied together **(Figure 4)** and connected to the tail of the resistor ground bus wire. The ground bus was extended to the front panel and connected to the ground lugs of the BNC switches **(Figure 5).**

Because I wanted the attenuation to increase as each control knob is turned clockwise, I wired the potentiometers using the center and high resistance side of each pot. I began by connecting the lead from terminal A of the selector switch to the center terminal of the right-side attenuator potentiometer. The high-resistance side of the right-side attenuator potentiometer was then wired to the center terminal of the right-side BNC jack.

AD2CS Audio Dummy Load Build - Continued on page 37

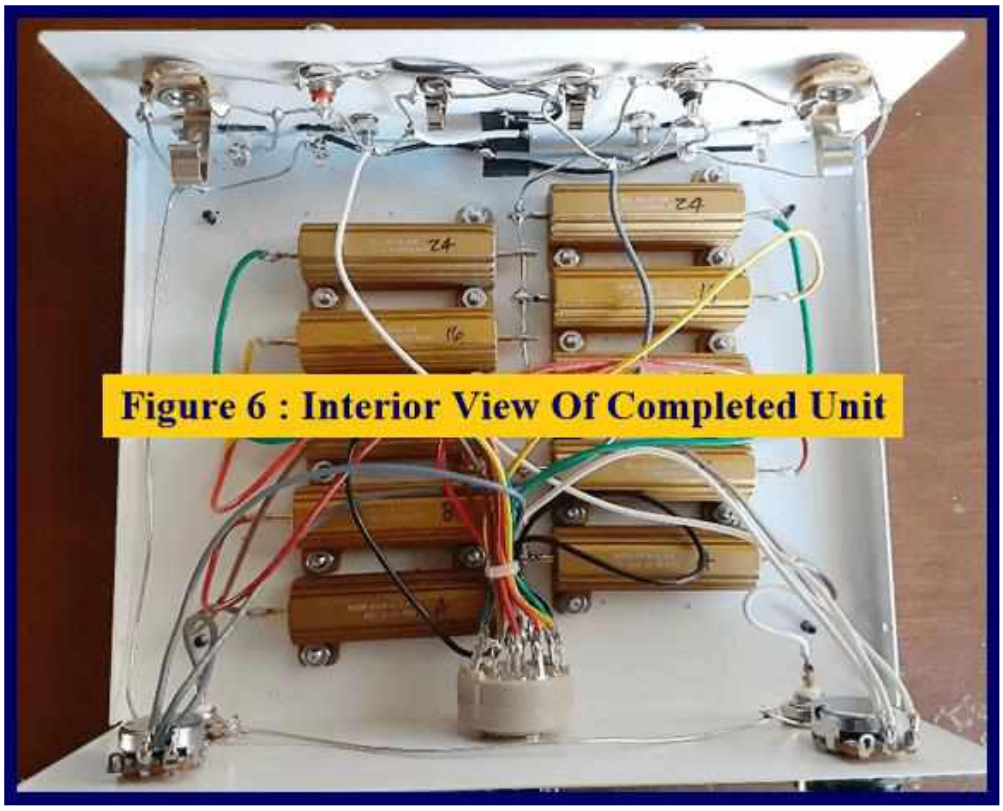


Figure 6 : Interior View Of Completed Unit

A bus was constructed that ties together all of the right-side isolated inputs, including the ring terminal of the stereo jack. This bus was then wired up to the center terminal of the right-side attenuator potentiometer. The same process was then followed to connect all of the left-side inputs, the tip terminal of the stereo jack, and the center terminal of the left-side attenuator potentiometer, tying in the wire lead that was soldered to terminal B of the selector switch. The high resistance side of the left-side attenuator potentiometer was wired to the center terminal of the left-side BNC jack.

For ease in future tracing of the circuit, I employed a standard electronics color-code sequence for the hookup wire, using BLK for the ground, BRN for four ohms, RED for eight ohms, ORN for twelve ohms, YEL for sixteen ohms, and GRN for twenty-four ohms. WHT was used for the right-side inputs, and GRY for the left-side inputs. This wire color scheme is evident in the illustration in **Figure 3** and again in **Figure 6**. Bare wire was used for bus wire in several locations throughout the assembly.

This turned out to be a very simple build, and when tested, it operated flawlessly. Had there been any DC present in the unit, I would have included capacitors in the leads to the oscilloscope ports. This was not necessary as there is no DC present within the circuit at all.

The first position of the selector switch is a ground position, intended solely for use in bleeding off any charge that may be present on any output-connected capacitors within the amplifier under test. That selector switch position is ***not*** for use at all while the amplifier under test is operating, as it would be the equivalent of placing a direct short-circuit across the amplifier outputs. I have quickly developed the habit of leaving the selector switch in its eight-ohm position as a hedge against any undesirable outcomes.

The idea for this instrument was born in a climate of necessity, but it turned out to be just exactly what was needed. It seems that the way to solve a problem sometimes is to throw ideas at it and see what sticks. In this case, the idea stuck and bore fruit, and another effective piece of equipment was added to my test bench.

Jersey String Band Update Report

By Glenn Dougherty N2YIO

The Band has been very busy during June. On June 13th we had two jobs. The first they traveled to Stafford NJ for a Founders Day Parade in the morning in full suit. Then they loaded back on the bus and traveled to North Wildwood for the String Band Association String Band Luau on the Seaport Pier. For this event all 14 bands performed this as a fund-raiser to help with the cost of the New Years Day Parade. The City of Philadelphia doesn't help much any longer except for the street cleanup after. The String Band Association is responsible for everything else plus the TV contract. So the Stafford parade and the Luau raise most of the money to fund the parade.

On Sunday, June 14, 2026, they helped out the Virtua Hospital with their Run with the Docs 5K Run event in Voorhees by leading the runners and walkers to the starting line for the run.

On Saturday, June 20, 2026, they traveled to Bradford, PA for a parade and play for about 15 minutes after that.

On Saturday, June 27, 2026, the Band traveled to Frackville PA for it's 150th Anniversary Parade.

And now for our upcoming events for July and August :

The Band will have parades on Saturday, July 4, 2026 :

- They will be in Paulsboro at 10 am.
- They then travel to Runnemede for their parade.
- In the evening they will be in Washington Township for the parade and fireworks.

We will be on the Boardwalk in Ocean City NJ on Thursday, July 9th from 6:30-9:00pm. We will march up to 8th or 9th Street, meet up with another band play a few songs the head back to 6th Street.

We will do the same thing on Tuesday, August 18th again from 6th street and then our final Boardwalk job will be on Tuesday, August 25th, but this time we will be starting from 14th Street.

Those Boardwalk jobs are a lot of fun with big crowds. A lot of people doing the strut and getting pictures taken with our Captain.

And finally on Saturday, September 12, 2026, is the Mummers Weekend Parade in North Wildwood along Old New Jersey Avenue at Keenan's Pub.

Well, that is all I have so far for the rest of the Summer. We start Mummer season by working on our theme for 2027. I do know that it will be a Hobo theme. I have no other details as of now.

As far as I know the Band is still looking for a place indoors to practice our drill on Wednesdays and Sundays starting in October through the end of December. If you know of any place, please reach out to me at gdougherty3@verizon.net with the info and I will pass it along to our Captain.

Don't forget, if you play an instrument or even if you don't and would like to stop out and just play some music, the Band meets at the Woodbury Heights Fire House every Wednesday evening from 7:30 until 9:30 with a fifteen minute break at 8:30. If you would like to become a marshal just on New Years Day or all the time you can always stop out or contact me for more information.

Again I would like to thank the Club for letting me post these reports.

73, N2YIO Glenn

Gloucester County Amateur Radio Club
General Membership Meeting Minutes
Wednesday, June 3, 2026

Meeting opened @ 1900 Hours by President Jonathan Pearce WB2MNF with the Pledge of Allegiance to the Flag

Attendance :
- **In-person : 34**
- **Via Zoom : 18**

Visitors :
- **Jim Wilson K5ND**

New Members :
- **Kevin Durrenberger AD2NB, Mount Royal, NJ**
- **Anthony Giardina WE2D, Galloway Township, NJ**
- **William Guerro Sr. W4WAG, Egg Harbor Township, NJ**
- **Carl Hyde W2CSH, Mount Laurel, NJ**
- **Robert Lange NO CALL, Somerdale, NJ**
- **Steven Marrano KC2VNI, Atco, NJ**

Announcements :
- July Tech Saturday Forum is the 11th, not the 4th
- **Bruce Canino KD2LBU (SK)**
- July Tech Saturday Forum "End Fed Halfwave Antenna", signup forthcoming

Upcoming Clubhouse Events :
- Tech Saturday "Introduction to GCARC Field Day" 6/6 @ 9AM
- License Testing 6/11 @ 7PM
- Board of Directors Meeting 6/17 @ 7PM
- Dinner at the Clubhouse 6/24 @ 6PM
- ARRL Field Day 6/26-28

Member current activities :
- No report

Business Meeting :
- Minutes of May 2026 business meeting as published in CrossTalk were approved by voice vote of members present.

Treasurer's report :
- 2026 Year to Date Income and Expense
- Remarks : Treasurer's report approved by voice vote of member's present.
- Gloucester County Amateur Radio Foundation
  - Report : **John O'Connell K2QA** reported on Foundation financials

Clubhouse report :
- Report : **Al Arrison KB2AYU** and **Frank Romeo N3PUU** pulled hardline to the VHF room

Future programs :
- Report : July 1, 2026 General Membership Meeting Program "Pizza Night"

June 2026 General Membership Meeting Minutes - Continued on page 40

June 2026 General Membership Meeting Minutes - Continued from page 39

DX and Contests :

- Report : **Tony Starr K3TS** reported on current contests via Zoom. Details in CrossTalk.

Public Service :

- Report : **Steve Farney W2SEF** reported on a NJ State ARES communications test on 6/13.
- **Karl Frank W2KBF** discussed the new Winlink RMS station he established in Bergen County.

Education Committee :

- Report : **Angela Metzger KE2DRJ** and **Jon Pearce WB2MNF** report on the upcoming "Space Communications Camp" for select STEM students from the Woodruff School.
- **Angela Metzger KE2DRJ** discussed latest STEM club activities and her experiences at the Dayton Hamvention.

Technical Committee :

- Report : **Jon Pearce WB2MNF** reported on the Club's WSPR project.

Old Business :

- **Jim Wright N2GXJ** discussed GCARC participation in the SNJ Section Club QSO Party.
- **Stan Slachetka WA2JRZ** provided an update on 250th Anniversary operating activities.

New Business : None

Presentation : "Meteor Scatter : Getting on the Air - How It Works" by Jim Wilson K5ND

Meeting adjourned @ 1956 Hours.

Respectfully submitted,
John Zaruba K2ZA,
Recording Secretary

Gloucester County Amateur Radio Club
Board of Directors Meeting Minutes
Wednesday, June 17, 2026

Meeting opened @ 1900 Hours by President Jonathan Pearce WB2MNF

Attendance :

- **President Jon Pearce WB2MNF : Present**
- **Vice President Ron Block NR2B : Present**
- **Treasurer John O'Connell K2QA : Present**
- **Recording Secretary John Zaruba Jr K2ZA : Present**
- **Corresponding Secretary Mike Resnick N2WOQ : Present**
- **Director (2024-2026) Al Arrison KB2AYU : Present**
- Director (2024-2026) Bill Price NJ2S :
- **Director (2025-2027) Jeffrey Garth WB2ZBN : Present**
- **Director (2025-2027) Frank Romeo N3PUU : Present**
- **Director (2026-2028) Chris Prioli AD2CS : Present**
- **Director (2026-2028) James Wright N2GXJ : Present**
- Trustee (2023-2026) Sheldon Parker K2MEN :
- Trustee (2024-2027) Len Rust W2LJR :
- Trustee (2025-2028) Earl Moore KC2NCH :
- **Trustee (2026-2029) Greg Ciraula K3GC : Present**
- **Member Stan Slachetka WA2JRZ : Present**

New Member Applications :

- **Theodore Coyle AA4AZ, Pittsgrove,NJ (Returning Member 2017)**
- **Virginia Macrie KA2ZZA, Hammonton, NJ (Returning Member 1986)**
- **Charles Shorter W2JOY, Pemberton, NJ**

Treasurer's Report :

- **Income : $12,444.72**
- **Expense : $7,241.63**
- **Net : $5,203.09**

Detailed financial statements are available for member review upon request. Treasurer's report approved by voice vote of Club officers present.

Committees :

- **Clubhouse : Al Arrison KB2AYU** reported an entire family of groundhogs has taken up residence at the Club site. Non-lethal control measures were discussed. Clubhouse is prepped for Field Day.
- **Programs : Frank Romeo N3PUU** gave a summary of the Club picnic.
- **Field Day : Jim Wright N2GXJ** discussed the status of Field Day preparations.
- **Tech Committee : Jon Pearce WB2MNF** discussed conducting an RF noise survey at the Clubhouse.

Old Business :

- **Jim Wright N2GXJ** discussed the upcoming Club QSO Party Contest.
- **Stan Slachetka WA2JRZ** provided an update on the Revolutionary War 250th Anniversary operating events.

June 2026 Board of Directors Meeting Minutes - Continued on page 42

June 2026 Board of Directors Meeting Minutes - Continued from page 41

New Business :

- Previous BoD meeting minutes as published in CrossTalk approved by voice vote of Club officers present.
- Discussion of remote station access, utilization, and training as pertains to membership. Further discussion tabled until July BoD meeting by unanimous consent of Club officers present.
- **Frank Romeo N3PUU** discussed an opportunity for the Club to acquire a ramp for the Clubhouse. The sense of the Board is due to the costs of installation beyond acquisition further investigation is warranted.
- **Jon Pearce WB2MNF** and **Al Arrison KB2AYU** are picking up new (to us) donated chairs for the Clubhouse.
- The board transitioned to an executive session to discuss personnel issues.
- **Club Nets :**
  - **40 Meter Net :** 7.165 MHz (+/- 10 kHz) @ 1930 Hours
  - **2 Meter Nets :**
    - **May 2026 :**
      - ⇒ Tuesday : Average 8.5 check ins
      - ⇒ Thursday : Average 6.75 check ins

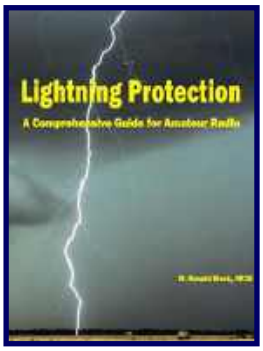
Meeting adjourned @ 2052 Hours

Respectfully Submitted,
John Zaruba Jr K2ZA
Recording Secretary

"The big thing about being in a club and being a "Ham" is to help each other when there is a need "
- W2SEF

Current Website Updates : Go to this page to find out the latest changes & updates on our W2MMD Website
https://gloucestercountyarc.weebly.com/current-website-updates.html

Lightning Protection :
A Comprehensive Guide for Amateur Radio
Author : W. Ronald Block, NR2B
Contact : ron@wrblock.com
Website : www.wrblock.com



Join ARRL In Celebrating America's 250th - On The Air!

In 2026, ARRL is commemorating America's 250th birthday with a yearlong on-the-air celebration: the America250 Worked All States (WAS) Award. Running from January 1 through December 31, this special operating event challenges amateurs of all license classes to contact all 50 US states and confirm those QSOs via **ARRL's Logbook of The World (LoTW - https://lotw.arrl.org/lotwuser/default).** Modeled after the classic WAS Award, America250 WAS encourages activity across nearly every band - from LF through microwaves - and on CW, phone, and digital, culminating in a commemorative, frameworthy WAS certificate.

Participants can pursue America250 WAS in many ways, with endorsements recognizing achievements by band, by mode, Triple Play (all three modes), by satellite, by contacting ARRL Affiliated Club Stations in all 50 states, and by contacting W1AW/portable in all 50 states. Throughout 2026, the iconic W1AW call sign will be "loaned" to stations nationwide, activating each state twice during the year. All confirmations are handled through LoTW, making it easy to track progress and apply for awards and endorsements. Operations begin 0000z on Wednesday, and end on 2359z Tuesday (7 days total for each activation).

See the complete schedule at the QR Code or the following URL : https://tinyurl.com/America250Schedule

Another FREE Clubhouse Resource Available To All Club Members

Training May Be Required : See Jon Pearce WB2MNF For Details

QSL card sent to Steve Farney W2SEF from 4J75M Special Callsign Dedicated To The 75th Anniversary of Mingachevir City, Azerbaijan

QSL card sent to Steve Farney W2SEF from 4J75M Special Callsign Dedicated To The 75th Anniversary of Mingachevir City, Azerbaijan

Special call sign to celebrate 75 years of Mingachevir which is the 4th largest city in Azerbaijan with a population of about 106,000. The current city was founded partly by German prisoners of war captured during World War II.The city forms an administrative division of Azerbaijan and located 323 km from the capital Baku. The settlement that would become Mingachevir began in the third millennium BC, during the Neolithic and Bronze Ages. The earliest known culture from this period is the Kura-Araxes culture. Later the area was dominated by the Khojaly-Gedabek culture. The region was significantly influenced by Caucasian Albania, a state established in the South Caucasus towards the end of the 2nd century BC. By the 7th century, Islam became the predominant religion throughout what is now Azerbaijan. In the late Middle Ages, Mingachevir was a thriving community with mosques, baths and markets.The modern Mingachevir was founded in 1948.The construction of the hydroelectric power station started immediately after the war and was completed in 1953. This marked the start of systematic and planned research of Mingachevir as an ancient settlement. The length of the reservoir is 70 km and total area 605 sq.km. The area of the town is 139.53 sq.km. Mingachevir is situated 545 meters above sea level on the foothill of the southeast of the Bozdag Mountain chain and on the edge of the Mingachevir reservoir. The city lies on both banks of the a 1515 km-long Kur river, which is the biggest and longest one in the Sth Caucasus. Mingachevir has been developing rapidly over the last years since it has been established. It is currently considered to be the fourth most developed city of the country both for its economic potential and the number of inhabitants, it is one of the most important cities of the republic in terms of energy, industry, science, education and culture.

W2MMD Clubhouse Rules

The following rules shall apply to all GCARC Clubhouse operations :

- **All persons entering the Clubhouse are to sign-in on the Clubhouse Log and sign-out when leaving.**
- **No damage shall be done to the building or to any equipment housed therein or on the Clubhouse premises.**
- **All members are equally responsible for the maintenance of the Clubhouse and the Clubhouse premises.**
- **The Clubhouse shall not be left unsecured, if unattended, including the setting of the alarm system.**
- **No changes or modifications to the Clubhouse infrastructure or are to be made without prior approval of the Clubhouse Committee Chair.**
- **No gasoline or other flammable liquid fuels shall be stored on the Clubhouse site.**
- **No alcoholic beverages are to be present at the Clubhouse or consumed on the Clubhouse Site.**
- **No foodstuffs that can attract vermin are to be left unsecured in the Clubhouse, including in the Clubhouse trash containers.**
- **No Clubhouse equipment is to be removed from the Clubhouse without being properly accounted for and signed out.**
- **Personal Clubhouse access codes are not to be shared with other individuals, regardless of membership status.**
  - ◊ **The Clubhouse entry access codes will be changed annually upon the removal of non-renewing members from the Club Membership Roster.**
- **The Club is NOT responsible for any personal property left at the Clubhouse.**
  - ◊ **Personal property should NOT be left at the Clubhouse without prior BoD approval.**
- **Members must receive training before attempting to use any of the test equipment on the Test and Repair Bench. Use of test equipment is on an at-your-own-risk basis.**
  - ◊ **Training is available on a one-to-one basis by appointment, and is also offered at various Tech Saturday Forum sessions.**
- **Members must receive training on the use of the Club radio equipment before attempting to use any of the radio equipment.**
- **Training is available on a one-to-one basis on most Saturdays or by appointment.**
- **The Clubhouse Committee would appreciate it if Club members, visiting the Clubhouse, would replenish the refrigerator with water bottles and soda.**
  - ◊ **Water and soda are stored in the Supply Closet in the kitchen.**

Word To The Wise

“Bug”

A mechanical key that generates dots and dashes by (for example) manipulation of paddles, and the swinging of a weight against a spring. Element length and spacing is controlled by mechanical adjustment. One current manufacturer is Vibroplex. Enthusiasts enjoy them as much for the mechanical art aspects as they do for their functionality, perhaps more.

GCARC HF Station (Local & Remote) Usage Guidelines

- All members who wish to operate the HF Station, either locally at the Clubhouse or from a remote location, are to reserve operating time for use of the station via the Clubhouse Calendar.
- Members may schedule a time period immediately before use if the time slot is open.
- No single user may block out any time period that encompasses an entire contest period.
- For major contests, as determined by our Contests Committee Chair, the station may be reserved for multi-operator local use at the Clubhouse, and therefore may not be available for remote use.
- The HF Station will be reserved for local use at the Clubhouse from 0800 to 1500 hrs on all ***Tech Saturday Forum*** dates.
- The HF Station will be reserved for local use at the Clubhouse from 1800 to 2100 hrs on all ***Dinner at the Clubhouse*** dates.
- Any member who reserves time on the HF Station and does not exercise that reserved time period within twenty minutes of the scheduled start time may be pre-empted by another user.
- When reserving a usage period via the Clubhouse Calendar, be sure to enter your call sign in the ***Who*** block, and to enter a valid phone number where you can be reached during the scheduled time period.
- If you find yourself not using the time period that you have reserved, or if you finish up prior to the expiration of your reserved time, go back to the Clubhouse Calendar and revise the time period to reflect the actual times, so that other members will see that the station is available for use.
- ***DO NOT DELETE YOUR RESERVATION ENTRY!***

ARRL Special Service Club
Gloucester County Amateur Radio Club
This certificate indicates the club's commitment to improve the visibility of amateur radio as a positive force in the community by assisting in emergencies, and providing and encouraging training; as well as to further club activities for the betterment of the membership and the amateur radio service.
ARRL SPECIAL SERVICE CLUB
ARRL The National Association for Amateur Radio
October 20, 2024
Date
Mike Walters, W8ZY
ARRL Field Services Manager

Regional Skywarn Websites For On-Line And In-Person Training Classes

Philadelphia/Mt Holly Skywarn : www.weather.gov/phi/skywarn
State College, PA Skywarn : www.weather.gov/ctp/skywarn
Pittsburgh, PA Skywarn : www.weather.gov/pbz/skywarn

Weather Information Nets & Frequencies

Hurricane Watch Net : www.hwn.org

- **Day Time : 14.325 MHz**
- **Night Time : 7.268 MHz**
- **Information : 14.300 MHz**

Local SKYWARN Frequencies :

- **Atlantic County : K2BR, 146.745 MHz (-) 146.2 Hz**
  - ◊ **Net Every Monday @ 1900 Hours**
- **Camden County : K2EOC, 146.895 MHz (-) 91.5 Hz**
  - ◊ **Net Every Thursday @ 2030 Hours**
- **Cumberland County : WA2WUN, 145.490 MHz, (-) 179.9 Hz**
  - ◊ **Net Every Monday @ 1930 Hours**
- **Gloucester County : W2MMD, 147.180 MHz (+) 131.8 Hz**
  - ◊ **Net Every Sunday @ 1930 Hours**
- **Salem County : N2KEJ, 146.625 MHz (-) 131.8 Hz**

What is a Skywarn Spotter?
By Jonathan Guseman KJ4ZWS, Warning Coordination Meteorologist
National Weather Service Central PA - https://www.weather.gov/skywarn

Spotters are our eyes/ears in the field! The NWS depends on our spotters to give us ground truth, therefore assisting in warning issuance and being heavily involved in reporting and documentation. As we issue warnings from inside of our offices, we greatly appreciate our spotters assisting us in the field and describing to us what is happening.

New Members Support Group & Discord Channel

- **Objective : To focus Club resources on the needs of newly licensed members**
- **Supported by "new_members" Discord Channel**

Additional Support :

- **Saturday Morning @ The W2MMD Clubhouse**
- **GCARC@MAILMAN.QTH.NET Club E-mail Reflector**
- **E-Mail President @ w2mmd.org**

To Be Added To The DX HONOR ROLL or Update Your Number, Please Contact Ernest Kraus KD2EAV meanddelcanotc@verizon.net

Name/Callsign	DXCC
Bill Grim W0MHK	352
Dave Strout W2YC	349
Edward De Fonzo W2DE	339
Darrell Neron AB2E	337
Bob Pantazes W2ARP	300
Gary Castellini N2IEC	288
Jim Wright N2GXJ	286
Sheldon Parker K2MEN	285
Vinnie Sallustio N4NYY	282
John Hill W2HUV	271
Tony Starr K3TS	250
Kenny Denson WB2P	248
Dennis Sandole K2SE	231
Bart Kleczynski AC2PT	180
Eric Morris N2BRJ	175
Art Strong KA0WS	169
Howard Marder WA2IBZ	161
Ben Johnson NE2R	153
Phil Nunzio WA3RGY	151
Steve Farney W2SEF	149
Rich Subers W2RHS	133
Marc Federici WM2Y	117
Chuck Capasso WB2PGE	104
Harry Strahlendorf W3DNQ	103
Jim Clark KA2OSV	87
Updated As Of 06/20/2026	

2026 GCARC Family Picnic
Jon Pearce WB2MNF & Terry Rossi N2LQH manning the BBQ

Need an expert BBQist for your next picnic, Call Jenny at 867-5309

Hmm...It's Saturday and you want to know if someone is at the Clubhouse? Why not call and find out!

W2MMD Clubhouse : 856-244-6914

July Birthdays

Congratulations To Our Members Who Are Celebrating A Birthday This Month

Diane Amico W2WHD
Robert Bagienski
Mike Beach KF2EM
Bill Bennett KE2GJG
John Borelli Jr KD2ZXP
Alex Calabrese WA2ADS
Chris Chamberlain N2IVN
Paul Cosenza KD2RDD
Jon Davidson KE2DYD
Herb Dyer KT2Y
Bert Espanol N3PKH
Jim Foster W3JNF
Gary Hewitt N2WHV
Jerry Jacobus WB2QEF
Chris Kelly Sr KC2PC
Jim Larkin KA2FFP
Don Martel Sr KE2AIB
Phyllis Martin W2PDB
Angela Metzger KE2DRJ
Ron Newman KE2DPO
Charlie Olinda N2SRQ (President 1994)
Bob Pantazes W2ARP
Mike Pecorini K2MRP
Mike Pentimall KC3VTF
Art Strong KA0WS (President 1999, 2000)
Micky Zerby W2EFR

In Memoriam : July Birthdays

Francis Applegate Jr N3DOM
William Bachman WA2VEE (President 1969)
Alfred Bestwick N2BTN
Paul Carr KB2TKV
Mary Kate Coursey WA2VRR
Richard Deane Sr KA2BNJ
Ralph Ditore K2KIT
Paul Fredricks K2FI
Wesley Gosbin Jr KB2IRK
Leon Jones KC2AAA
John Kull WB2GKH
John Logan Jr KB2VSE
Harold Lowther N2EJN
Alfred Marcy W4ID
Lee Marino N2LAM
Albert Miller KB2YDX
Masayoshi (Iggy) Nishina KD2MGU
Tadeusz Niziol N2BDC
Haywood Pelley WA2EVK
Goldie Rosenberg N2YNB
Conrad Salati N2HTS
Edward Sumek W2GSN (President 1989)
James Swyler WB2ELG
Alan Trueblood N2FJQ
Wallace Utley W2CB
Charles Wahl Jr KC2STO
Rolf Wurmbach KD2VQG

CrossTalk Submissions

This is your Club Magazine. Make use of it.

If you have stories or photos of your hobby that you would like to share with the Club, please do so! We will keep covering all of the GCARC events, but it is also nice to get those personal perspectives to include in every issue. Connecting through experiences is what makes the Gloucester County Amateur Radio Club a *REAL* Club.

All submissions, queries, comments, and editorials should be addressed to :
Jeff Garth WB2ZBN at djgrath1 <*at*> gmail <*dot*> com

Submission deadline for the August 2026 issue : Monday, July 20, 2026

Club Website www.w2mmd.org
Club E-Mail Reflector : GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net

Electronic Tool Tip #19 - DIP IC Extractor Pliers

By Chris Prioli AD2CS - chris@ad2cs.com - www.ad2cs.com

Every now and then, I have the need to remove a DIP-style integrated circuit (IC) chip from its holder on a circuit board. While it is easy enough, most of the time, to gently pry the chip from the socket, there may be insufficient space to get in at either end of the IC, and besides, prying the IC will often bend the pins of the chip. This is where the ***Ungar #6980 DIP IC Extractor Pliers (Figure 1)*** come in handy.

It is unfortunate that this is a discontinued item, meaning that it is no longer available from the manufacturer, because I find this tool to be an excellent aid in removing DIP IC's of almost any size.

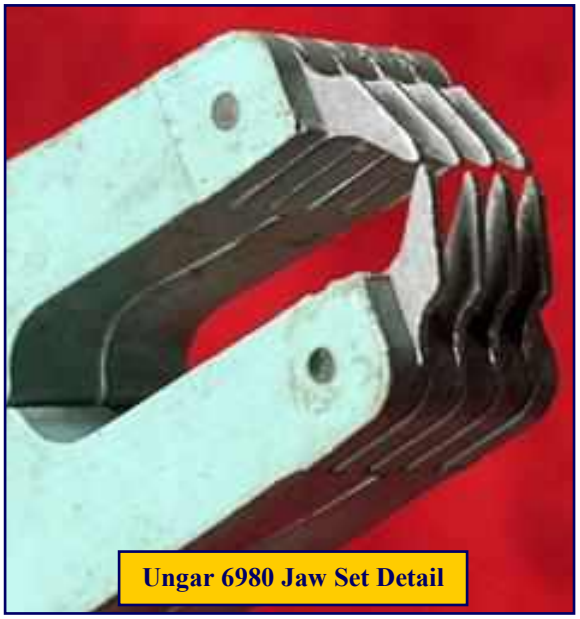
The tool is spring loaded in the ***"closed"*** direction, which provides a firm and positive grasp on the IC being extracted. The jaws are equipped with ***comb-like teeth (Figure 2)*** that will easily reach in between the IC pins without damaging the IC in any way. The spring closure of the tool causes it to be wedged tightly under the body of the IC, forcing it upward and out of its socket.

While the tool is intended for use with socketed IC's, I have also found it to be useful when removing IC's that are directly soldered to a PCB. I simply clamp the pliers onto the IC in question and then, as I desolder the pins, the spring force wedges the IC up and away from the PCB as the pins are released from their soldered positions. In combination with the desoldering pump of my solder station, this tool makes removing soldered IC's a snap.

As I mentioned, the **Ungar #6980** pliers are no longer being made. However, they can still be found relatively easily on the online auction sites such as **www.ebay.com**.

When I purchased mine, they were still in production, and I paid about six dollars for the tool. Current auction site prices run from twelve dollars upward. Get one now while they can still be found. Some of the auctions illustrate the tool still in its original packaging. If you can find these pliers for anything less than about twenty dollars all in, you are doing well and will not be disappointed with your purchase.

Ungar 6980 DIP Extractor Pliers



Ungar 6980 Jaw Set Detail

Full Buck Moon - Wednesday, July 29, 2026 @ 1037 Hours

At this time, the antlers of bucks (male deer) are in full growth mode. This Native American name was noted by Captain Jonathan Carver during his travels in the 1760s. Other animal-related names include Feather Moulting Moon (Cree) and Salmon Moon, a Tlingit term indicating when fish returned to the area and were harvested. As far as the plant world, there was Berry Moon (Anishinaabe), Moon When the Chokecherries are Ripe (Dakota), Month of the Ripe Corn Moon (Cherokee), and Raspberry Moon (Algonquin, Ojibwe), among others. Thunder Moon (Western Abenaki) and Halfway Summer Moon (Anishinaabe) are other variants.

Old Farmer's Almanac - www.almanac.com

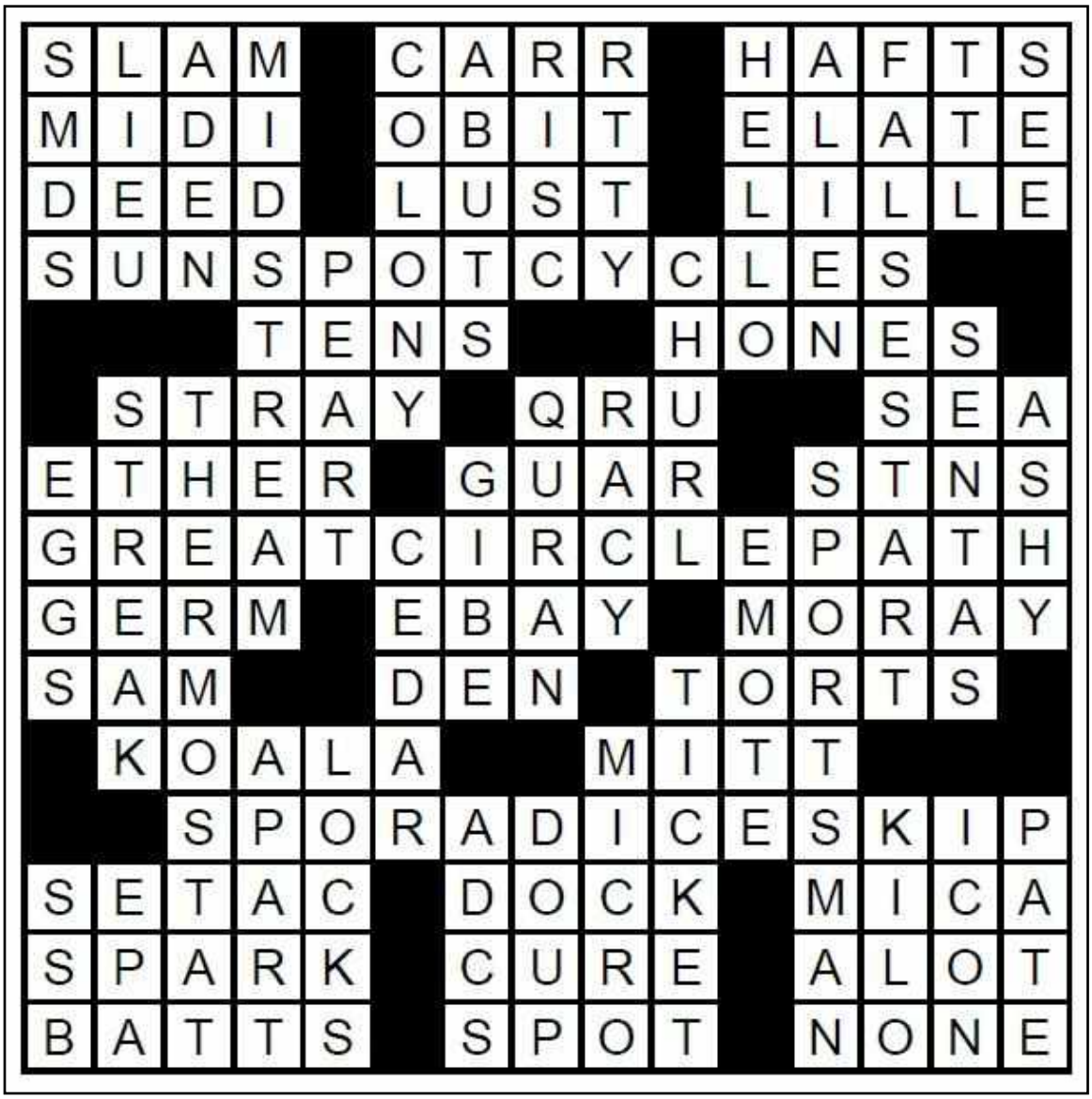
Announced DX Operations : July 2026

www.ng3k.com/Misc/adxo.html

From The Shack of Bill Feidt NG3K : www.ng3k.com

2026 Jun27	2026 Jul14	**St Pierre & Miquelon**	**FP**	LoTW	TDDX 20260302	By KV1J as FP/KV1J; 80-6m; SSB CW FT8; QSL via Club Log OQRS or KV1J direct; QRV for IARU contest and CQ VHF Contest
July						
2026 Jul04	2026 Jul23	**Crete**	**SV9**	LoTW	OPDX 20260513	By HB9EMP as SV9/HB9EMP; HF
2026 Jul22	2026 Aug14	**South Cook Is**	**E51KEE**	LoTW	OPDX 20260317	By ZL2KE fm Rarotonga I; HF; CW, some SSB; QSL via IK2DUW, Club Log OQRS, eQSL
2026 Jul23	2026 Aug08	**Azerbaijan**	**4K**	LoTW	OPDX 20260207	By DL4XT as 4K/DL4XT fm Baku; 20-10m; SSB CW FT8; 100w; 1/4 wave vertical; QSL via Club Log OQRS
RSGB IOTA Contest (Jul 25-26, 2026) Check here for pericontest activity too.						
2026 Jul26	2026 Aug06	**South Cook Is**	**E51CZZ**	IK2DUW	OPDX 20260317	By ZL4CZ fm Rarotonga I; HF; SSB

Also for your convenience, there is a direct link to NG3K on our website. Click on the NG3K DX Page.



CQWW WPX Contest CW 2026
May 30, 2026

Call : TO3E
Operator (s) : AB2E
Station : FM5BH

Class : SOAB HP
QTH : Martinique
Operating Time (hrs) : 32.5
Location : Other North America

Summary :

Band	QSOs
80 :	50
40 :	913
20 :	707
15 :	537
10 :	355

Total : 2,562 Prefixes : 1,058
Total Score : 9,360,126

Club : Frankford Radio Club **001**

Comments :
Special thanks to my host Laurent, FM5BH who maintains and improves his station every year. This is my 2nd year for WPX CW. He has a pair of towers in a very small yard. This year he added antenna phase box, so the big antenna was pointing EU and the 2nd tower with a tribander and 2L 40m Yagi at stateside most of the contest. This proved especially effective for optimizing 40m at night, which resulted in nearly 1000Qs,and half of my multipliers.

Score was down by .5meg from last year, but so was 10m activity. However, mults were up by 50+. I broke 1000mults much earlier this year, last year I just made 1000 at the end of the contest. Condx for Fri night on 40 were amazing, constant stream of loud EU and US calling in. I noticed I was still working many EU on 40 long after their sunrise. 40m accounted for 53% of total QSO points, but only 1/3 of total QSOs. Just took a 2hr nap around 1100UTC Sat morning, then moved to 20 until 15 opened. Some great mults called in, including some rare DXCC like TN8. Looking forward to my return next year! Thanks to all my friends who called in from everywhere during the contest. Contest QSOs already uploaded to LoTW. All other QSOs uploaded Wednesday when I get home.

73 Darrell TO3E (AB2E)

ARRL Digital Contest 2026
June 6, 2026

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : SO1R-8 LP
QTH : SNJ
Operating Time (hrs) : 5
Location : USA

Summary :

Band	QSOs
20 :	123

Total : 123
Total Score : 938

Club : Frankford Radio Club **002**

Comments :
Callsign : AB2E
Contest : ARRLIDC

Band	Mode	QSOs	Pts	Mul	Pt/Q
14	FT4	123	938	0	7.6
Total	Both	123	938	0	7.6

Score : 938
1 Mult = 1.0 Q's

CQWW WPX Contest CW 2026
May 30, 2026

Call : K3TS
Operator (s) : K3TS
Station : K3TS

Class : SOAB HP
QTH : WPA
Operating Time (hrs) : 6
Location : USA

Summary :

Band	QSOs
40 :	115
20 :	75
15 :	15

Total : 205 Prefixes : 193
Total Score : 178,718

Club : Frankford Radio Club **003**

Comments :
Limited part-time effort, as the weather was just too nice to spend much time in the shack. If nothing else, this was a little bit of practice for Field Day, which is coming up in a few weeks. Until then, 73 de K3TS. Rural hilltop location at 1600 feet asl, near I-70 and the PA Turnpike, 15 miles north of the PA-MD border.

Tower : Rohn 45G Antennas 2x Force 12 C19xr at 45 and 90 feet
Wire dipoles for 80 and 40
Rig : Yaesu FTdx-101D Amp: Acom 2000a

7th Call Area QSO Party 2026
May 2, 2026

Call : NE2R
Operator (s) : NE2R
Station : NE2R

Class : SOCW LP
QTH : NJ
Operating Time (hrs) :
Location : Out of State/Province

Summary :

Band	CW Qs	Ph Qs	Dig Qs
Total :	**8**	**0**	**0**

Mults : 6
Total Score : 144

Club : Frankford Radio Club

004

New England QSO Party 2026
May 2, 2026

Call : NE2R
Operator (s) : NE2R
Station : NE2R

Class : Single Op LP
QTH : NJ
Operating Time (hrs) :
Location : Out of State/Province

Summary :

Band	CW-Dig Qs	Ph Qs
Total :	**61**	**0**

Mults : 35
Total Score : 4,270

Club : Frankford Radio Club

005

CQWW WPX Contest CW 2026
May 30, 2026

Call : NE2R
Operator (s) : NE2R
Station : NE2R

Class : SOAB LP
QTH : SNJ
Operating Time (hrs) : 7.0
Location : USA

Summary :

Band	QSOs
40 :	**67**
20 :	**167**
15 :	**51**
10 :	**3**
Total :	**288**

Prefixes : 198
Total Score : 129,096

Club : Frankford Radio Club

006

ARRL June VHF Contest 2026
June 13, 2026

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : SO FM HP
QTH : SNJ
Operating Time (hrs) : 12

Summary :

Band	QSOs	Mults
6 :	**198**	**80**
Total :	**198**	**80**

Total Score : 15,840

007

Club : Frankford Radio Club

Comments :
Antenna : M2 6M5X
Rig : FTDX-9000D/OM Power 2000A+

6M FT8 only. No VHF antennas above 6m. First time in this contest. Worked ME & RI to finish out lower 48 for 6m WAS. Only need HI and AK now.

73 Darrell AB2E

Callsign : AB2E
Contest : ARRLVHFJUN

Band	Mode	QSOs	Pts	Grd	Pt/Q
50	FT8	198	198	80	1.0
Total	Both	198	198	80	1.0

Score : 15,840
1 Mult = 2.5 Q's

July 2026 Contest Calendar - WA7BNM Contest Calendar : www.contestcalendar.com

July 2026	
RAC Canada Day Contest	0000Z-2359Z, Jul 1
Phone Weekly Test	0230Z-0300Z, Jul 1
A1Club AWT	1145Z-1300Z, Jul 1
CWops Test (CWT)	1300Z-1400Z, Jul 1
VHF-UHF FT8 Activity Contest	1700Z-2100Z, Jul 1
Mini-Test 40	1700Z-1759Z, Jul 1
Mini-Test 80	1800Z-1859Z, Jul 1
CWops Test (CWT)	1900Z-2000Z, Jul 1
VHF-UHF FT8 Activity Contest-NA	0000Z-0500Z, Jul 2
Walk for the Bacon QRP Contest	0000Z-0100Z, Jul 2 and 0200Z-0300Z, Jul 3
CWops Test (CWT)	0300Z-0400Z, Jul 2
CWops Test (CWT)	0700Z-0800Z, Jul 2
NRAU 10m Activity Contest	1700Z-1800Z, Jul 2 (CW) and 1800Z-1900Z, Jul 2 (SSB) and 1900Z-2000Z, Jul 2 (FM) and 2000Z-2100Z, Jul 2 (Dig)
SKCC Sprint Europe	2000Z-2200Z, Jul 2
QRP Fox Hunt	0100Z-0230Z, Jul 3
NCCC FT4 Sprint	0100Z-0130Z, Jul 3
Weekly RTTY Test	0145Z-0215Z, Jul 3
NCCC Sprint	0230Z-0300Z, Jul 3
K1USN Slow Speed Test	2000Z-2100Z, Jul 3
Venezuelan Ind. Day Contest	0000Z-2359Z, Jul 4
NZART Memorial Contest	0800Z-0859Z, Jul 4 and 0900Z-0959Z, Jul 4 and 1000Z-1059Z, Jul 4
TA VHF/UHF Contest	1200Z, Jul 4 to 1200Z, Jul 5
ARAM 50 MHz Contest	1200Z-2400Z, Jul 4
Marconi Memorial HF Contest	1400Z, Jul 4 to 1400Z, Jul 5
CQ Worldwide VHF SSB/CW Contest	1400Z, Jul 4 to 1400Z, Jul 5
Original QRP Contest	1500Z, Jul 4 to 1500Z, Jul 5
PODXS 070 Club 40m Firecracker Sprint	2000Z, Jul 4 to 2000Z, Jul 5
FOC Old School Classic 1960s QSO Party	1200Z, Jul 5 to 1200Z, Jul 6
K1USN Slow Speed Test	0000Z-0100Z, Jul 6
ICWC Medium Speed Test	1300Z-1400Z, Jul 6
OK1WC Memorial (MWC)	1630Z-1729Z, Jul 6
RSGB 80m Club Championship, CW	1900Z-2030Z, Jul 6
ICWC Medium Speed Test	1900Z-2000Z, Jul 6
ARS Spartan Sprint	0000Z-0200Z, Jul 7
Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 7
ICWC Medium Speed Test	0300Z-0400Z, Jul 7
Tuesday's Telegraphy Contest	1930Z-2030Z, Jul 7
Phone Weekly Test	0230Z-0300Z, Jul 8
A1Club AWT	1145Z-1300Z, Jul 8
CWops Test (CWT)	1300Z-1400Z, Jul 8
VHF-UHF FT8 Activity Contest	1700Z-2100Z, Jul 8
Mini-Test 40	1700Z-1759Z, Jul 8
Mini-Test 80	1800Z-1859Z, Jul 8
CWops Test (CWT)	1900Z-2000Z, Jul 8
VHF-UHF FT8 Activity Contest-NA	0000Z-0500Z, Jul 9
CWops Test (CWT)	0300Z-0400Z, Jul 9
CWops Test (CWT)	0700Z-0800Z, Jul 9
QRP Fox Hunt	0100Z-0230Z, Jul 10
NCCC FT4 Sprint	0100Z-0130Z, Jul 10
Weekly RTTY Test	0145Z-0215Z, Jul 10
NCCC Sprint	0230Z-0300Z, Jul 10
K1USN Slow Speed Test	2000Z-2100Z, Jul 10
SKCC Weekend Sprintathon	1200Z, Jul 11 to 2400Z, Jul 12
IARU HF World Championship	1200Z, Jul 11 to 1200Z, Jul 12
QRP ARCI Summer Homebrew Sprint	2000Z-2300Z, Jul 12
4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Jul 13
K1USN Slow Speed Test	0000Z-0100Z, Jul 13
ICWC Medium Speed Test	1300Z-1400Z, Jul 13
OK1WC Memorial (MWC)	1630Z-1729Z, Jul 13
ICWC Medium Speed Test	1900Z-2000Z, Jul 13
Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 14
ICWC Medium Speed Test	0300Z-0400Z, Jul 14
DARC RTTY Sprint	1800Z-1929Z, Jul 14
Tuesday's Telegraphy Contest	1930Z-2030Z, Jul 14
Phone Weekly Test	0230Z-0300Z, Jul 15
A1Club AWT	1145Z-1300Z, Jul 15
CWops Test (CWT)	1300Z-1400Z, Jul 15
VHF-UHF FT8 Activity Contest	1700Z-2100Z, Jul 15
Mini-Test 40	1700Z-1759Z, Jul 15
Mini-Test 80	1800Z-1859Z, Jul 15

July 2026 Contest Calendar - Continued on page 56

July 2026 Contest Calendar - Continued from page 55

Mini-Test 80	1800Z-1859Z, Jul 15
RSGB 80m Club Championship, SSB	1900Z-2030Z, Jul 15
CWops Test (CWT)	1900Z-2000Z, Jul 15
VHF-UHF FT8 Activity Contest-NA	0000Z-0500Z, Jul 16
Walk for the Bacon QRP Contest	0000Z-0100Z, Jul 16 and 0200Z-0300Z, Jul 17
NAQCC CW Sprint	0030Z-0230Z, Jul 16
CWops Test (CWT)	0300Z-0400Z, Jul 16
CWops Test (CWT)	0700Z-0800Z, Jul 16
NTC QSO Party	1900Z-2000Z, Jul 16
QRP Fox Hunt	0100Z-0230Z, Jul 17
NCCC FT4 Sprint	0100Z-0130Z, Jul 17
Weekly RTTY Test	0145Z-0215Z, Jul 17
NCCC Sprint	0230Z-0300Z, Jul 17
K1USN Slow Speed Test	2000Z-2100Z, Jul 17
LABRE DX Contest	0000Z, Jul 18 to 2359Z, Jul 19
Russian Radio Team Championship	0700Z-1459Z, Jul 18
Trans-Tasman Low-Bands Challenge	0800Z-1400Z, Jul 18
Feld Hell Sprint	1200Z-1359Z, Jul 18
IARU Region 1 70 MHz Contest	1400Z, Jul 18 to 1400Z, Jul 19
CQ Worldwide VHF Digital Contest	1400Z, Jul 18 to 1400Z, Jul 19
North American QSO Party, RTTY	1800Z, Jul 18 to 0559Z, Jul 19
RSGB International Low Power Contest	0900Z-1200Z and 1300Z-1600Z, Jul 19
YOTA Contest	1000Z-2159Z, Jul 19
Run for the Bacon QRP Contest	2300Z, Jul 19 to 0100Z, Jul 20
K1USN Slow Speed Test	0000Z-0100Z, Jul 20
ICWC Medium Speed Test	1300Z-1400Z, Jul 20
OK1WC Memorial (MWC)	1630Z-1729Z, Jul 20
ICWC Medium Speed Test	1900Z-2000Z, Jul 20
Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 21
ICWC Medium Speed Test	0300Z-0400Z, Jul 21
Tuesday's Telegraphy Contest	1930Z-2030Z, Jul 21
SKCC Sprint	0000Z-0200Z, Jul 22
Phone Weekly Test	0230Z-0300Z, Jul 22
A1Club AWT	1145Z-1300Z, Jul 22
CWops Test (CWT)	1300Z-1400Z, Jul 22
Mini-Test 40	1700Z-1759Z, Jul 22
Mini-Test 80	1800Z-1859Z, Jul 22
CWops Test (CWT)	1900Z-2000Z, Jul 22
CWops Test (CWT)	0300Z-0400Z, Jul 23
CWops Test (CWT)	0700Z-0800Z, Jul 23
RSGB 80m Club Championship, Data	1900Z-2030Z, Jul 23
QRP Fox Hunt	0100Z-0230Z, Jul 24
NCCC FT4 Sprint	0100Z-0130Z, Jul 24
Weekly RTTY Test	0145Z-0215Z, Jul 24
NCCC Sprint	0230Z-0300Z, Jul 24
K1USN Slow Speed Test	2000Z-2100Z, Jul 24
RSGB IOTA Contest	1200Z, Jul 25 to 1200Z, Jul 26
Alabama QSO Party	1500Z, Jul 25 to 0300Z, Jul 26
ARS Flight of the Bumblebees	1700Z-2100Z, Jul 26
K1USN Slow Speed Test	0000Z-0100Z, Jul 27
QCX Challenge	1300Z-1400Z, Jul 27
ICWC Medium Speed Test	1300Z-1400Z, Jul 27
OK1WC Memorial (MWC)	1630Z-1729Z, Jul 27
QCX Challenge	1900Z-2000Z, Jul 27
RSGB FT4 Contest	1900Z-2100Z, Jul 27
ICWC Medium Speed Test	1900Z-2000Z, Jul 27
Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 28
QCX Challenge	0300Z-0400Z, Jul 28
ICWC Medium Speed Test	0300Z-0400Z, Jul 28
Tuesday's Telegraphy Contest	1930Z-2030Z, Jul 28
Phone Weekly Test	0230Z-0300Z, Jul 29
A1Club AWT	1145Z-1300Z, Jul 29
CWops Test (CWT)	1300Z-1400Z, Jul 29
Mini-Test 40	1700Z-1759Z, Jul 29
Mini-Test 80	1800Z-1859Z, Jul 29
CWops Test (CWT)	1900Z-2000Z, Jul 29
CWops Test (CWT)	0300Z-0400Z, Jul 30
CWops Test (CWT)	0700Z-0800Z, Jul 30
QRP Fox Hunt	0100Z-0230Z, Jul 31
NCCC FT4 Sprint	0100Z-0130Z, Jul 31
Weekly RTTY Test	0145Z-0215Z, Jul 31
NCCC Sprint	0230Z-0300Z, Jul 31
K1USN Slow Speed Test	2000Z-2100Z, Jul 31

RUTGERS UNIVERSITY
Cooperative Extension
of Gloucester County
New Jersey Agricultural Experiment Station

RED, WHITE & BLUE

4-H Wants You!

Join us for a barnyard salute to celebrate America

GLOUCESTER COUNTY 4-H FAIR

JULY 23RD - 26TH

275 BRIDGETON PIKE, RT 77, MULLICA HILL, NJ

$20 PER CARLOAD- GOOD FOR ALL 4 DAYS!

gloucestercounty4hfairgrounds.com

Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and Boards of County Commissioners, Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.

47th ANNUAL SCARC HAMFEST
SUSSEX COUNTY ARC

Sunday July 12, 2026

Sussex County Farm & Horse Show Fairgrounds
Acres of outdoor tailgate space
and 12,000 sq. ft. of indoor space.
Food, Door Prizes and Ample Parking too!
Gates open at 6:00 am for sellers and 8:00 am for buyers.
VE Session held in Admin bldg from 9:30 - 12:00

ARRL Approved

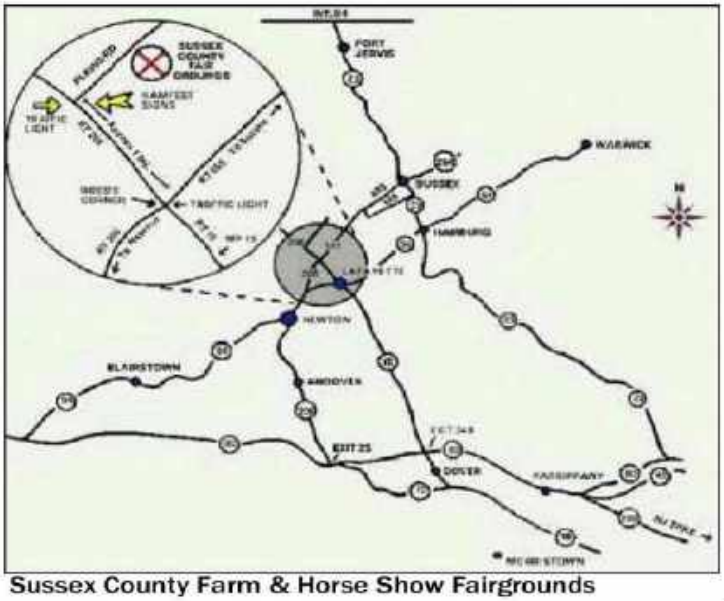
BUY - SELL - TRADE!
Starts 8:00 AM

Door Prizes

1st Prize: Yaesu FT-891 HF/50Mhz transceiver
2nd Prize: Yaesu FTM-150R 2M/440 transceiver
3rd Prize: Yaesu FT-3165RASP 2M transceiver
4th Prize: $100 DXEngineering gift certificate
5th Prize: $100 cash (winner must be present)

WRITE NOW ... RIGHT NOW!

Don't Wait ... get information and advance registration now.
WRITE TO: Brian Brunsch KC2YON
PO BOX 312 AUGUSTA, NJ
07822
Phone: 973-862-8124 - Email: hamfest@scarcnj.org



Sussex County Farm & Horse Show Fairgrounds
37 Plains Road, Augusta, NJ 07822
Lat. / Long: 41° 08' 10.2" x 74° 43' 01.9"
(decimal 41.136200 x -74.717233)
Absolutely NO Food or Drink sales are permitted.
Sellers must leave spaces clean.

- Admission: $8
- Indoor Tables: $25
- Tailgate Space: $25 - includes One Admission
- Each Additional person: $8
- No electricity outdoors.
- Bring your own table and chair.
- Saturday Setup after 6PM
- Overnight camping fees: RV $55 /Others $30

Talk-In is 147.30 (+) PL 151.4

For Hamfest information and reservations please contact
Hamfest@scarcnj.org
www.sussexhamfest.org
www.facebook.com/scarcnj
Phone: 973-862-8124

2026 Club Committees

Standing Committees	Committee Chairs
Budget	John O'Connell K2QA
Constitution & By-Laws	Ron Block NR2B
Education	Chris Prioli AD2CS
Field Day	Jim Wright N2GXJ
Hamfest	Ron Block NR2B
Health, Welfare, & Silent Keys	Bill Price NJ2S
Hospitality	Jeff Garth WB2ZBN
Membership & Membership Badges	Chris Prioli AD2CS
Publicity	Mike Resnick N2WOQ
Repeaters	John Zaruba Jr K2ZA
Volunteer Examiner Liaison	Chris Prioli AD2CS
W2MMD Clubhouse Site	Al Arrison KB2AYU

Activity Committees	Committee Chairs
Awards & Certificates	GCARC Board of Directors
Club Photographer	Phil Nunzio WA3RGY
Club Publications & Historian	Jeff Garth WB2ZBN
Contests	Tony Starr K3TS
GCARC Foxhunts	Jim Wright N2GXJ
GCARC Picnic	Frank Romeo N3PUU
GC-ARES Emergency Coordinator	Bob Keogh KD2NEC
Holiday Dinner Party	Beth Barnish KB2EAL
Membership Roster Database	Jeff Garth WB2ZBN
Nominations	Jon Pearce WB2MNF
Programs : General Membership Meetings	Ron Block NR2B
Radio Nets	Steve Farney W2SEF & Jeff Garth WB2ZBN
Technical (Tech Saturday, TechNets)	Jon Pearce WB2MNF
W2MMD License Trustee	Darrell Neron AB2E
W2MMD Special Event Station	Mark Gottlieb KK2L

GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net e-mail reflector guidelines

1. **No attachments** (e.g. pictures, files) are allowed on the reflector.
2. If you have Club-related pictures that you would like to share, you can send them to the webmaster, he will put them on the website and will send out a general e-mail to all the members.
3. Otherwise, the pictures will have to be sent to the members' addresses.
4. URLs/Hyperlinks are acceptable on the reflector.
5. Do not send any messages with e-mail addresses in the **BCC** (**Blind Carbon Copy**) field. The message will be rejected. Use only the **To:** or **CC:** fields.
6. Members are subscribed to the reflector using the member's e-mail address from the roster database. You must use that address when sending an e-mail via the reflector.
7. If you use another address on the reflector, the message will get rejected or "*bounced*", because the reflector does not recognize that address. Whenever a message sent to reflector is rejected or *"bounced"* for various reasons, the administrator has to log-in to the Mailman.QTH website and approve the message.

The W2MMD Repeaters

2 Meter Repeater
Output : 147.180 MHz
Input : 147.780 MHz
Offset : +600 kHz - PL : 131.8 Hz
(Conventional FM plus C4FM Capability)
EchoLink : W2MMD-R

70 cm Repeater
Output : 442.100 MHz
Input : 447.100 MHz
Offset : +5 MHz - PL : 131.8 Hz
(Conventional FM plus C4FM Capability)

The above repeaters are both
located in Pitman, NJ
GPS : 39.728481°, -75.131088°

1.25 Meter Repeater
Output : 224.660 MHz
Input : 223.060 MHz
Offset : -1.6 MHz - PL : 131.8 Hz
Location : Sewell, NJ
GPS : 39.746738°, -75.077094°

SKYWARN™ Net
Sunday @ 1930 : 147.180 MHz Repeater

Gloucester County ARES Net
Sunday @ 2000 : 147.180 MHz Repeater

GCARC TechNet ZOOM Forum
Available Every Monday @ 1930 Hours
Join ZOOM Meeting Link :
https://bit.ly/3K8bWwj

Tuesday AfterNoon 2M Net @ 1200 Hours

Monday & Thursday Night 40M Net
1930 Hours : 7.165 MHz (+/- 10 kHz)

Thursday 2M Net @ 2000 Hours

All 2 Meter Nets Are Also On EchoLink :
W2MMD-R

Meeting Calendar

General Membership Meeting
Wednesday, July 1, 2026
1900 Hours
Pfeiffer Community Center
Simulcast Live on ZOOM
Meeting ID : 982 4039 1944
Passcode : 091084
Join ZOOM Meeting Link :
https://bit.ly/4s67geS

Board of Directors Meeting
Wednesday, July 17, 2026
1900 Hours
W2MMD Clubhouse

"Ask not what your Club can do for you,
Ask what you can do for your Club"
- KA2OSV

"There's More To Ham Radio Than
You Can Possibly Do!"
- K3TS

*** Badges ***

Need a new or replacement badge
Contact "*The Badge Man*"

Chris Prioli AD2CS
chris@ad2cs.com

Question Pool Answers : E6B01:B; E6B02:D; E6B03:B; E6B04:A; E6B05:D; E6B06:D; E6B07:B; E6B08:A; E6B09:C; E6B10:B; E6B11:A